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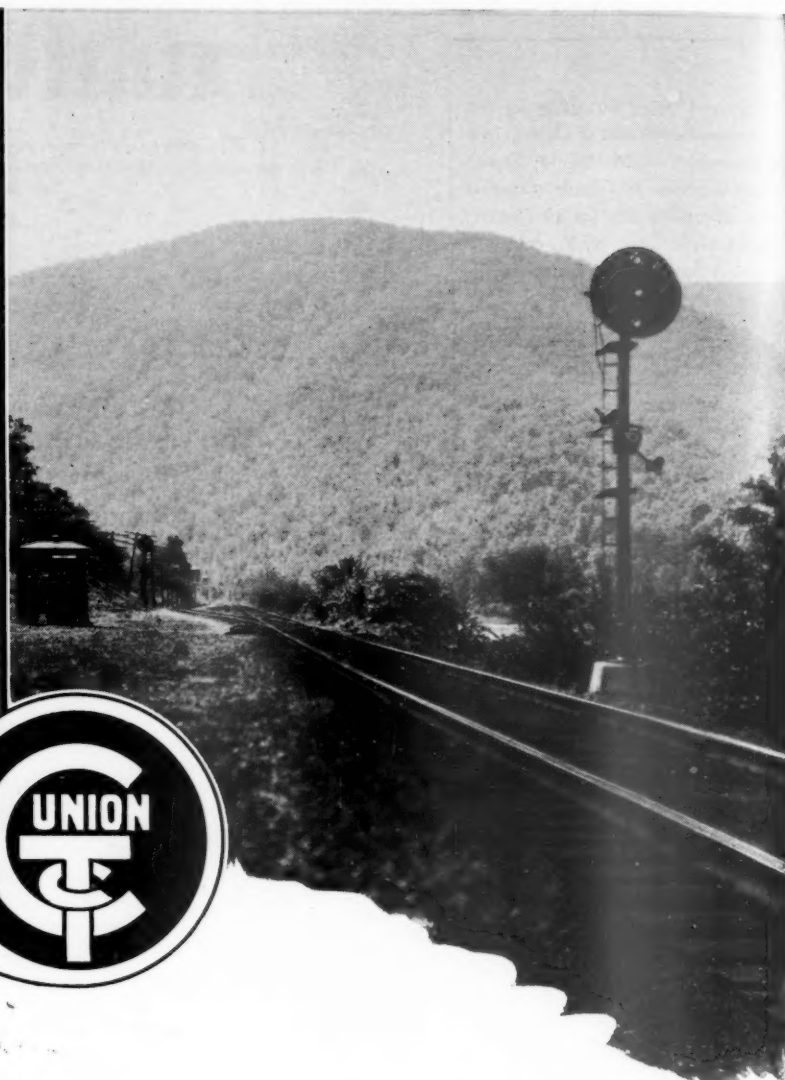
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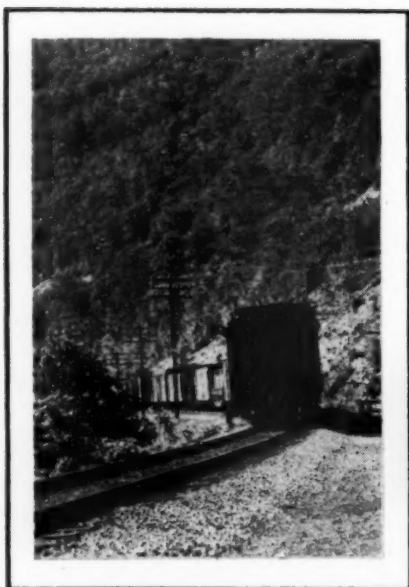
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Railroads—In Decay Or Still Pioneering?

The editor of a well-known business magazine has asked us the following questions:

Doesn't the problem of the railroads go far beyond that of public relations? Isn't it to some degree paralleled by the street railway situation, where competitive services were offered that the public preferred?

These questions are fundamental. Transportation agencies have been put out of business in the past by newer methods which excelled them in convenience and economy. Thus the steamship superseded the sailing vessel. The railroads supplanted the river steamers, the canal packets and the stage coaches. Buses and private automobiles have, as our correspondent points out, largely taken the place of the trolley car in urban transportation.

Trolley Cars Afford No Parallel

We know that motor transportation, and river transport rejuvenated by liberal doses of tax money, have made large inroads into railroad traffic. Is there a parallel between what is happening to the railroads and what has happened to horse-drawn transportation in the past, and to the urban electric railway in our own time? There is, we believe, no such parallel—because the methods of transport which have heretofore been supplanted were in all cases inferior in economy and convenience to the newer methods which took their place. This is not true of the steam railroads to any important degree—the railroads are still intrinsically superior to their rivals for the great bulk of the transport demands of the country.

It is a paradox, perhaps, that a method which is still pre-eminent in the low-cost mass production of transportation should nevertheless lose ground to competitors. Various reasons are given to account for this paradox. Some cite the discriminatory treatment by the taxing and regulatory authorities, against the rail-

roads and in favor of their competitors. Others blame "bad management" for the plight of the rail carriers, while still others see narrowly-selfish unionism as the villain in the piece. There is, however, we believe, an explanation which is far more fundamental than any of these which gets much nearer the basic facts of the situation—and this is that *no technique for the successful long-range conduct of large-scale enterprise has yet been worked out*. "Big Business" is a relatively new development—considerably less than 100 years old—and its problems are radically different from those of small business. The western world has had two thousand years or more in which to perfect its knowledge of how to conduct small business—but it has had only a few decades of experience in dealing with the vastly different and more complicated job of developing a technique which will work as well for Big Business.

The Pioneer Gets It in the Neck

The railways are the first victims of business bigness combined with ignorance of how to manage and regulate it in the public interest. Unless much better means of managing and regulating it are soon developed and adopted, all kinds of Big Business will be in a comparatively short time in the same condition as the railroad industry and present the same general problem.

Since the railroads are a Big Business, the so-called "mistakes" of management are not evidence of a peculiar incompetence, but, more accurately, that of the "trial and error" method, which is the only means of bringing a machine or an institution to perfection. And it is not alone on the managerial side that large-scale business is still in the experimental stage. Government relationships to Big Business have not achieved the ideal either. The same holds true for labor relationships. About all we know for sure on this last aspect of the question is that the labor relations which have

been found satisfactory in small business are not equally satisfactory for Big Business.

The extreme newness of large-scale enterprise is not popularly appreciated. Neither is its immense complexity. And hardly anyone except a handful of scholars seems to realize that the technique for the successful operation of large business (successful, that is, for generations and not just a couple of decades) is entirely different from the technique which will work successfully for small business. (Just for instance—a high degree of immediately selfish behavior by small business is frequently not incompatible with the public interest, whereas Big Business must invariably adopt the view that it is to its self-interest to serve the public interest if it is to avoid being a menace to general prosperity, including its own.)

All "Big Business" Riding for a Fall

Now, with some realization of the crushing weight of the problems to which Big Business has given rise, it is also clearly evident that all these new and complex problems have come to light in their most acute form in the railroad industry—and that there are no precedents upon which to rely in solving them. The railroads were the first big businesses. It is, therefore, inevitable that all the mistakes which management and labor and government are bound to make in dealing with a totally new institution should first come to light on the railroads. The fact that the consequences of these mistakes are evident on the railroads, but are not yet evident in the utilities, in steel, in automobile manufacture, does not mean that the railroads are the only sufferers from errors by management, labor and government. The same ills that afflict the railroads are present in embryo in all other large enterprise. When and if these errors have had as many years to operate in these new arrivals to the ranks of Big Business as they have had in the case of the railroads, their unpleasant effects will be just as marked.

There is no better evidence of what the policies applied to the railroads have done to them, and of the effect that similar policies will have on other kinds of Big Business unless a better technique for managing and regulating it is adopted, than is afforded by the

Dow-Jones "Low" Averages of Industrial and Railroad Stocks

Year	Industrials	Railroads	Year	Industrials	Railroads
1898	42	56	1934	86	33
1908	59	86	1935	97	27
1918	73	77	1936	143	41
1928	191	133	1937	114	29
1932	41	13	1938	99	19
1933	59	23	Jan. 23, 1939	141	29

Dow-Jones average prices of industrial and railroad stocks during the last forty years. The "lows" at ten year intervals in the thirty years 1898 to 1928, in the last seven depression years, and on January 23, 1939, are given in an accompanying table.

It will be observed that in both 1898 and 1908 the average price of railroad stocks was much higher than the average of industrial stocks, and also that during this decade the average of railroad stocks increased relatively more than the average of industrial stocks. Meantime, however—in 1906—effective government regulation of railways had begun; and in 1918 the average of industrial stocks was almost as high as that of railroad stocks, while in 1928 it had become much higher. The same general tendencies have prevailed throughout the depression. In other words, during the period of prosperity ending in 1929 the prices of industrial stocks *increased much more* than those of railroad stocks, while during the depression the prices of industrial stocks have *declined much less* than those of railroad stocks. The final result was that on January 23, 1939, the industrial average of 141 was almost five times as great as the rail average of 29.

Made to Order for Socialism

It is good socialist doctrine that when the development of Big Business reaches the stage that it has in the United States, government will necessarily and inevitably take over its ownership and management in behalf of the public. Is the railroad industry, which afforded the first examples of Big Business in this country, also to be the first socialized because of our failure to develop an adequate technique for the management and regulation of Big Business under private ownership? And, if so, are other large industries rapidly to follow it into socialization for the same reason?

The railroads have been the guinea pig for a vast and complex experiment in social control of economic enterprise—a guinea pig whose sufferings, if the American people are wise, may prove a valuable pain-saver to others. But the railroad guinea pig is not, as some mistakenly think, weak and anæmic because of old age and general decrepitude. He is weak from political blood-letting and from being vivisected in the interest of social science in the large. His ills are not peculiarly his own, but those of a vast tribe of his fellows.

Taking leave of analogy—is it not clear, if Big Business is to survive in this country (in those places where its intrinsic superior efficiency proves its right to survival), that its problems must be recognized? These problems cannot just be hushed and hidden in the case of the railroads, and then magically solve themselves when they become acute in one after another of the other large industries. And become acute they will unless some method of solving them is developed and applied.

Waterways and T. V. A. a Warning

To get down to cases—take the question of competition with the railroads, insofar as it is actually less

economic than railroad service, as for instance the half-witted development of inland waterways: Why has such idiotic competition arisen to plague the railroads, while, so far, most other big businesses are free from it? The answer to this apparent enigma lies in the fact that a large corporation is politically impotent, and that the politicians and special interests have been aware of this fact as far as the railroads are concerned for 30 or 40 years—which is more years than most other businesses have been big. The present exposure of the railroad industry to competition subsidized out of the public treasury and aided by regulatory favoritism represents the accumulation of political depredations which have been going on for three decades with constantly increasing boldness.

The same political attack exists in embryo against all other large-scale enterprise—and the laws which the courts have upheld in the political raids on the railroads serve as precedents to speed the barrage against other Big Business when their time comes. As a matter of fact, the political raid on another large industry—utilities—is well on its way. This is evidenced, not only by the T. V. A. and other government power projects with their crooked "yardstick" schemes, but by other projects to wreck utility rate structures by building municipal plants to take over the "cream" of their business. This is precisely what politics has done to the railroads by its subsidization of truck service. And yet other kinds of Big Business are still encouraging government in setting in the railroad business the precedent of political blood-letting regardless of its ultimate effects not only on the railroads, but on all Big Business.

Is Business too Stupid to Act in Unison?

If the utilities protested against this sort of injustice until they themselves became its victims, such protest escaped our notice. And even now that they are protesting, they are doing so apparently under the misapprehension that they have been singled out for particular persecution—oblivious to the fact that they are suffering a malady from which no large-scale enterprise in this country can escape unless the present policies of and toward Big Business are changed. They ignore the fact that the mistreatment, at which they properly complain, has gone much further in the case of the railroads than it has with them. And, finally, the beleaguered utilities get no aid or comfort from the large industries which hope to prosper from the purchase of subsidized power, any more than the railroads get any help from the oil and automobile and other large enterprises which *temporarily* are prospering at the expense of the railroads.

We emphasize that word *temporary*—because every large industry in this country which does business across state lines comes under the commerce clause of the Constitution; and, apparently, under recent court

decisions, there is very little that politics has already done to the railroads and is now doing to the utilities that it cannot also do to other businesses. The infection from the malady from which the railroads are suffering touches every large-scale enterprise in this country. There are selfish interests undoubtedly which would like to have their taxes lightened by overtaxing the automotive industry. After the railroads have succumbed to such discriminatory treatment, largely at the instance of the automotive industry and its allies, there will be just that many fewer corporations left for the political forces to prey upon.

What arrogance it is for the leaders of big business to believe that they can escape being brought under the regimen which they have, by their political forays against the railroads, helped to establish as *standard treatment for all large scale enterprise!*

All Big Business Has Railways' Diseases

It would be possible to pile up almost endlessly from other large-scale enterprise specific instances of the seeds of every single one of the evils which afflict the railroads. We desist from doing so farther because of exigencies of space, and because our readers can multiply such examples from their own experience. To be sure, the managers of some of these other industries will profit to some extent from the "mistakes" which railroad managers have made—insofar as the law and the labor unions will let them. But let them not overlook the fact that, under the law as they have helped fasten it on the railroads (and, by precedent, ultimately upon themselves), the power of management in large-scale enterprise is a job of rapidly diminishing prerogatives. They cannot avoid the things that politics will do to them unless some restraint is placed on the power of politics over large enterprise in general. A man could make an easy living for himself if the law would authorize him to seize the property of everybody else, but protect him from similar assaults by others. But the law doesn't work that way—at least not in a democracy.

We have said that large corporations have no political power. That is true only where they are isolated. If the large corporations would deal fairly with each other and with their employees and their customers—and if they would make plain to their employees and their customers and their security-holders just how corporation policy was in the interest of employees, of customers and of security holders, then they could probably become extremely powerful politically; and most of their troubles would vanish.

Is Bigness of Business Necessary?

The *Railway Age* is no special pleader for Big Business. On the contrary, we are not in favor of Big Business where little business can do the job with

comparable economy. Little business regulates itself, whereas Big Business requires administrative intelligence on the part of managers, labor and government, which has been mighty slow to develop in adequate quality or quantity. Still, we cannot have mass production without Big Business—and without mass production we cannot maintain our standard of living, and it is doubtful, if living standards should become much worse, whether our present population could be maintained. Plainly, despite its complexity, America has no alternative except to try to make large-scale enterprise work in those industries where only mass production can keep costs down within reach of mass consumption.

To revert, then, to the specific question with which we opened this discussion: Doesn't the problem of the railroad go far beyond that of public relations? Our answer is both a Yes and a No. It is No insofar as any serious difficulties of the railroads can be ascribed to the development of new methods of transportation which are superior to them in true economy. From that angle, if the railroads could succeed by "public relations" efforts in removing the political handicaps which beset them, then they would quickly be restored to a degree of relative prosperity.

We cannot, however, contend that the difficulties of the railroads do not go deeper than any "public relations"

program would touch—because the railroad industry shares in the problems of all large-scale enterprise.

Nobody Knows All the Answers

No "public relations" program can excel the intelligence of those who utter it. The answer as to what system of management and government and labor relations will serve to make large enterprise over a long period operate at the highest social efficiency is not known. But at least all thoughtful persons know some characteristics that a successful system for the control of large enterprise can *not* display. And one such characteristic is the control of the enterprise to serve an immediately selfish end of any narrow group. Freedom to be selfish is an attribute that has never been justified, even in theory, for any business except a very little one.

We believe it might be well for leaders of Big Business to learn at least the ABC's of what the underlying problems of Big Business actually are, before they embark on a campaign of trying to "sell" the present so-called "system" to the American people. The present "system" is no real system at all, as has been shown by the wreckage that it has made of the railroads; and it has the same ruin in store for every other kind of Big Business unless its shortcomings that have ruined the railroads are remedied.

"An Improper Appointment"

The appointment of former Representative Thomas R. Amlie of Wisconsin to the Interstate Commerce Commission is on its face not a good choice. It is not a good choice because Mr. Amlie's expressed views are admittedly "extremist" upon matters of national policy concerning the province in which the Commission functions, and the nature of the Commission's functions is such that extremist views, *whether of the right or the left* should have no representation in its membership.

The Commission is vested with both quasi-judicial and quasi-legislative, as well as with executive powers, as are so many other of the "administrative" bodies which are becoming so important a feature in government. It was created for the express purpose of *regulating private enterprise and private capital* engaged in performing a service directly affected by a public interest. It is manifestly improper that its powers should be entrusted to officials known to possess extreme views either in the direction of substituting public for private ownership and operation or of abandoning or minimizing regulation. Either set of views constitutes a virtual disqualification for the office, for it is inevitable that they will tend to move their possessor either to extend or to constrict the law's application beyond or within its proper province.

Mr. Amlie's views are sufficiently illustrated by his activities in the House of Representatives in the introduction

of bills to put the federal government in control of all industry by practical socialization. Independently of the merits or demerits of the idea, its total incompatibility with the purpose for which the Commission exists is obvious, and this incompatibility necessarily disqualifies him for the office. It in no way, of course, constitutes the smallest reflection on his personal character.

But character of the highest does not suffice to remove that disqualification for this particular class of public service.

Government has become a very complex matter nowadays for obvious reasons and we are compelled to delegate extraordinary powers in all the three departments, judicial, legislative and executive to administrative officials. In this fact lurks the danger of a bureaucratic despotism which might in fact imperceptibly transform our government of laws into a government of men. The only safeguard that we have lies in the appointing power's recognition of the fact that the powers delegated by the law should rest only in hands that can be trusted neither to strain the law beyond its proper scope, nor to sabotage its proper functions within their legitimate sphere of operation.

Mr. Amlie's appointment is a mistake. The Senate has the power to rectify it by declining to confirm it, and it should so decline.

From the Wall Street Journal

Reconstructs Failed Ore Dock Wall at Cleveland

Pennsylvania uses H-section bearing piles up to 91.5 ft. long in rebuilding structure formerly supported by concrete piles

BECAUSE of marked settlement and lateral movement of the dock wall at its ore unloading dock No. 11 at Cleveland, Ohio, the Pennsylvania recently undertook the reconstruction of nearly 560 lin. ft. of the wall, using spliced H-beam piles ranging up to 91.5 ft. in length as the supporting agency. Through the use of piles of this length, it was possible to land them on a solid support, thereby precluding further settlement of the dock wall which originally was supported on 40-ft. precast concrete piles. Other features of interest on this project include the driving and testing of an experimental pile to determine its bearing power, and the construction of a bridge to carry the new dock wall across a city water tunnel 9 ft. 4 in. in diameter.

Dock Carries Hulett Unloaders

Dock No. 11, which is located on Lake Erie, was constructed in 1910 and is built for operation with Hulett unloaders for transferring ore from lake vessels direct to railroad cars or to storage, there being four machines of this type in operation at the dock. Essentially, these are traveling cranes which move parallel with the water front and operate, by means of flanged wheels, on two tracks or runways, 71 ft. apart, one of which lies on the

dock. By means of large clamshell buckets and an overhead conveying system, these machines remove the ore from the holds of the lake boats and deposit it either in cars spotted on any of the four tracks that are located between the legs of the cranes or in a concrete trough which extends along the back of the dock.

The crane runway is 871 ft. long and each of the crane tracks is carried on a continuous concrete beam of substantial proportions, which is supported on precast reinforced concrete piling, there being three lines of 30-ft. piles under the rear runway support and two lines of 40-ft. plies under the front runway support, which also forms the dock wall. At intervals of 30 ft., these runway supports are connected by reinforced concrete struts, 3 ft. by 4 ft. 6 in. in cross-section, each of which is supported by a line of 30-ft. concrete piles on 5-ft. 6-in. centers. Provision for expansion in the dock is made at intervals of 150 ft. where expansion joints are provided between double struts. Reinforcing in the old dock wall consists of nine lines of 100-lb. rails, the rails in each line being joined with fully-bolted angle bars.

Since the space between the two crane track supports is filled to a level above the tops of the struts to form a subgrade for the loading tracks, it was necessary to provide some means of confining the fill material back of the



Left — Looking West Along the Reconstructed Dock Wall. Note the Pile Driver in the Background. Right—View of the Reconstruction Operations, Showing the Pile Driver in Action





General View of Ore Dock
No. 11 From the East

outside support. To this end a longitudinal wall of concrete sheet piling laid horizontally is provided between the two lines of piling underneath the dock wall.

Settlement Occurs

Over a period of time substantial settlement and lateral movement in the direction of the water front was noted in both the supporting structure for the Hulett machines and in the ore trough behind it. This movement was particularly noticeable in the dock wall which is subject not only to the vertical load imposed by the weight of the ore unloading machines but also to severe lateral thrust and increased vertical load when the machines are engaged in unloading ore. Settlement of the dock wall was particularly marked in the vicinity of the west end of the dock where the unloading operations are concentrated as it has been customary to permit the use of the tracks at the east end for loaded cars.

During 1937, when the movement of ore across the dock was unusually heavy, it was observed that the settlement and lateral displacement of the dock wall continued at an accelerated pace, and measurements made in July, 1937, showed that the wall had settled a maximum of 2.7 ft. and had moved laterally a maximum of 1.8 ft. The settlement tapered off to 1.1 ft. at the west end and 0.61 ft. at the east end, while the lateral movement at the west and east ends was 0.98 ft. and 0.59 ft., respectively.

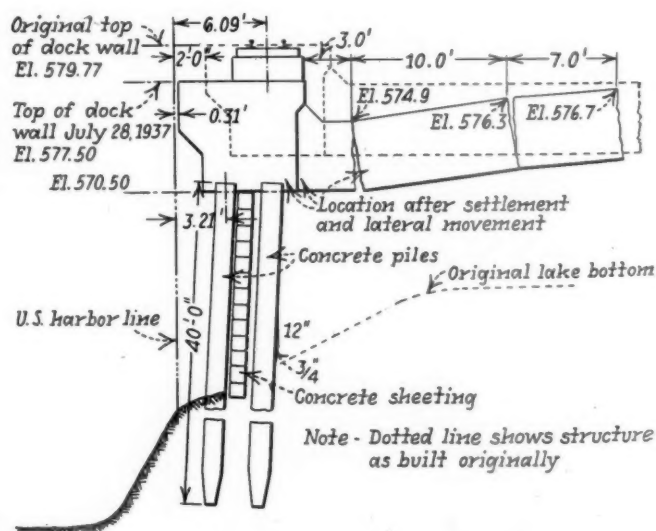
Further examination of the dock revealed that the displacement had been accompanied by extensive damage to many of the struts, this damage being manifested generally by two breaks in each strut, one about 3 ft. from the rear face of the dock wall and the other about 10 ft. from the first. In many instances, the stresses set up in the struts as a result of the settlement of the dock wall were sufficient to result in rupture of the reinforcing steel as well as breakage of the concrete.

Reconstruction Authorized

With conditions thus pointing to the obvious need for renewing much of the dock wall, the railroad, on February 18, 1937, authorized the reconstruction of 105 ft. 10 in. of the wall in accordance with a revised design embodying 14-in. by 14½-in. 89-lb. H-section bearing piles. The intention at that time was to observe the performance of this new dock wall in service before the reconstruction of the wall was undertaken on a larger

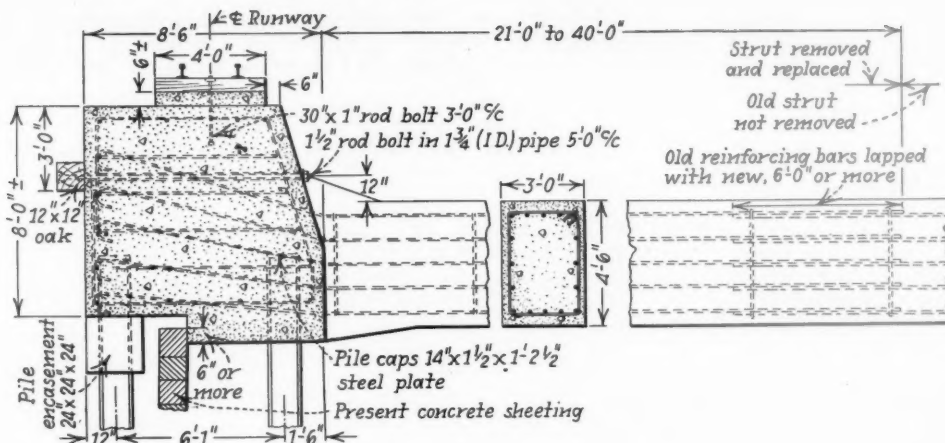
scale. However, as the extent of the damage to the old wall became fully evident during the reconstruction work on the 105-ft. 10-in. section, it was decided to proceed immediately with the replacement of additional sections of the wall. In January, 1938, the company authorized the reconstruction of an additional 150-ft. section somewhat to the west of the first section, while in the following month it was decided to proceed with the reconstruction of the 232 ft. 2 in. of wall between the first two sections, and of a section 71 ft. 1 in. long at the western extremity of the previously authorized portions. Thus, authorization was obtained for the reconstruction of a total of 559 ft. 1 in. of the dock wall.

The design and dimensions of the new dock wall show considerable variation as compared with those of the original structure. The latter was 7 ft. deep, 6 ft. wide at the bottom and 8 ft. wide at the top, including a 1-ft. 6-in. overhang on the water side and a 6-in. overhang on the other side. On the other hand, the new structure is 8 ft. 10 in. wide and about 9 ft. deep, the cross-section being substantially rectangular except that it was necessary to mortise the lower corner at the water side to accommodate the top of the line of concrete sheeting and also except that the rear of the wall is beveled on a



Typical Section Through the Old Dock Wall, Showing the Extent
of the Movement

Typical Section Through the New Dock Wall and One of the Struts



gentle angle so that the width of the wall at the top is reduced to 7 ft.

The new wall was made wider than the old wall in order to make it possible to place two lines of bearing piles in such a position that they would straddle the old concrete piles and sheeting, both of which were left in place. Thus, the two lines of H-sections are 6.1 ft. apart, center to center, and in each line the individual piles are on 6-ft. centers, being arranged in a staggered formation. Each pile is capped with a 14-in. by 1 1/2-in. by 14 1/2-in. steel plate which was tack-welded in place after the pile had been cut off at the proper elevation. In the line of bearing piles on the water side of the wall, each pile is encased in a 24-in. by 24-in. concrete "boot" for a distance of 2 ft. below the bottom of the wall.

The dock wall is liberally reinforced with conventional reinforcing rods and one line of 100-lb. rails on top of each row of piles. As in the original wall, the new structure is protected on the water side by a wood fender held in place by 1 1/2-in. bolts on 5-ft. centers, which extend through to the back of the wall. On top of the dock wall, the crane runway rails, which have a gage of 1 ft. 9 1/2-in., are supported on 7-in. by 9-in. by 4-ft. creosoted wood ties which are embedded in a concrete shim 4 ft. wide and 1 ft. 6 in. in depth. A similar shim also formed part of the original structure.

Observations of Test Pile

In the reconstruction of the 105-ft. 10-in. experimental section, the bearing piles were driven to refusal, but before proceeding with further work a test pile was driven to confirm the fact that it was necessary, in order to secure the desired bearing power, to drive the piles to this depth. This pile was first driven to a depth of 77.5 ft. below the cut-off elevation of the piles in the new wall, after which, using a calibrated jack, a load was applied in increments of 25 tons, a period of 24 hr. being allowed to elapse between the application of successive increments. During the application of the first 100 tons,

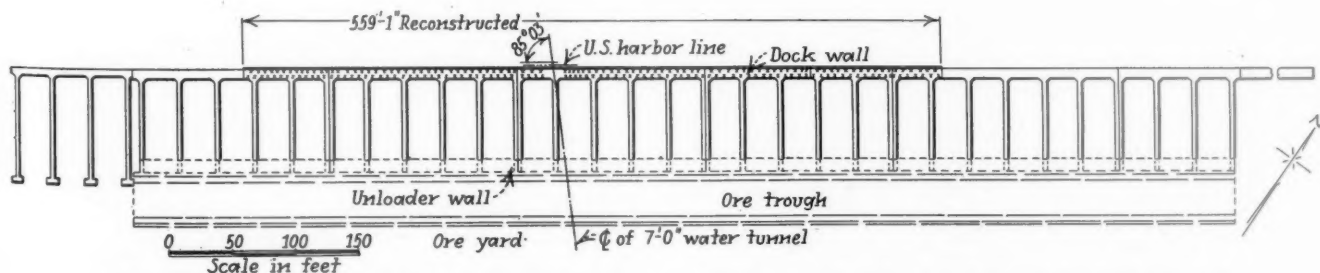
the pile settled 0.046 ft. and, after another 25 tons had been imposed, a further settlement of 0.096 ft. took place. Thus, under a load of 125 tons the pile settled 0.142 ft. This pile was then driven to refusal and a total load of 200 tons applied without further settlement. It was thus evident that, if settlement of the new dock wall was to be avoided, it would be necessary to continue driving the piles to refusal, and this practice was followed throughout the reconstruction work.

During the early phases of the project, an attempt was made to use 14-in. by 14 1/2-in. 73-lb. bearing piles. However, as difficult driving conditions were encountered, it was found that piles of this weight were not capable of withstanding the punishment to which they were subjected during the driving operation. The 89-lb. section was, therefore, chosen for the remainder of the wall. These piles average about 90-ft. in length, and for the most part, consist in each case of a 54-ft. and a 40-ft. section spliced together by means of four 1 1/4-in. by 6 1/2-in. by 36-in. splice plates fillet-welded to the inside flange surfaces.

Driving of Bearing Piles

In accordance with prevailing practice, the splice plates were welded to the lower end of the top section of each pile before it was lifted into position on the previously driven lower section. This was done and the completion welds made with the splice five or six feet above the water so that the performance of the welds could be observed for a time before the splice disappeared from view. On the water side of the dock, the 54-ft. lengths were driven first but in the other row, where hard driving was encountered at a relatively shallow depth because of the presence of boulders in the fill behind the concrete sheeting, the shorter sections were driven first. All the piles were driven with a McKiernan-Terry 10-B-3 steam hammer hung from the swinging leads of a "whirley" crane mounted on a scow.

(Continued on page 190)



Plan of the Ore Dock, Showing the Reconstructed Portion of the Dock Wall and the Location of the Water Tunnel

Bureau of Motor Carriers Progresses

I. C. C. division cites work done in bringing order
into chaotic transportation field

THE annual report of the Interstate Commerce Commission dealing with its Bureau of Motor Carriers indicates that a certain amount of administrative progress was made by that body in 1938. The complaint is made however, that the appropriations were inadequate, only \$3,250,000 having been received of the \$4,239,000 requested for 1938. Perhaps the greatest progress was made in clearing up the "grandfather" cases and final disposition of all of these is now in sight. The report is abstracted in detail as follows:

Progress Report

A promising beginning has been made in the establishment of stable and reasonable rates. These proceedings were necessary, because of the desperate financial straits to which most of the carriers had been brought by competitive rate cutting. Progress has been made in the field of enforcement of the act. One such case involved the nation-wide prosecution of violators of the act generally known as travel bureaus. Those who were prosecuted were operating under the pretense that they merely bring together casual transporters on the one hand and persons willing to share the expense of travel on the other. It was shown, however, that the actual transporters were motorcar operators engaged in transportation as a regular occupation. Operations of this kind have often been characterized by flagrant misconduct, such as abandoning passengers in inconvenient and out-of-way places, and by serious accidents occasioned by lack of safety precautions. The successful prosecution of 39 such concerns has greatly reduced the prevalence of this particular form of evasion of the act and of the resulting injury to the public.

The other group of cases involved the successful prosecution of shippers as accessories to violations of the act by motor carriers of property. In many instances the carrier who grants rebates or concessions does so reluctantly and only because of pressure upon him imposed by the shipper. In such instances the conduct of the shippers seems more deserving of condemnation than that of the carrier. Successful prosecution of shippers in these cases has had a wholesome effect.

During the past year additional rules and regulations have been promulgated. Rules governing the transfer of operating rights under the provisions of section 212 became effective September 1, 1938. Effective January 1, 1938, we prescribed accounting classifications governing the forms of accounts to be kept by class I carriers of passengers and property. Later we prescribed regulations requiring monthly and quarterly reports from such carriers. Splendid co-operation has been received from state authorities in respect to these accounting regulations. In many states forms of accounts and of reports covering the intrastate operations of such carriers are required by state authorities. Since most large carriers are engaged in both interstate and intrastate operations,

it was feared that a heavy burden might be placed upon them by the requirement that differing forms of accounts be kept and differing forms of reports be required. To meet this situation, informal correspondence was inaugurated with the state authorities with the result that in the case of all states except one, in which forms of accounts are prescribed for intrastate motor carriers, the carrier will be required to keep but one set of accounts and that is to be in conformity with our requirements.

During the year, rules governing hours of service were also promulgated. These rules prescribe that drivers of vehicles must have at least 8 hours of rest after 10 successive hours of driving and that the total hours on duty during any one week shall not exceed 60. Hearings have also been assigned in respect to the prescription of hours of service for private carriers.

The safety regulations prescribed by us for common and contract carriers became effective last year. Co-operation with state authorities has continued, with the result that any carrier engaged in interstate or foreign commerce who complies with our safety rules will be in compliance with the rules of all the states with one exception. The accident reports required have begun to accumulate so that it is anticipated that we will soon have data from which we will be able to obtain more accurate information as to the causes and means of prevention of accidents in motor-vehicle operation than has hitherto been available.

The principal cases involving railways decided during the year include a decision in *Scott Bros., Inc., Collection and Delivery Service*, 4 M. C. C. 551, finding that the operations of motor carriers under contract with rail carriers in terminal areas are not subject to regulation under part II of the Interstate Commerce Act but are included in the regulation of rail carriers under part I thereof. Our finding in the case of *Acme Fast Freight, Inc., Common Carrier Application*, 8 M. C. C. 211, was that such freight forwarders are neither brokers nor motor carriers, as those terms are defined in the act, although they are common carriers at common law.

In *Union Pac. R. R. Co.—Control—Union Transfer Co.*, 15 M. C. C. 101, we found that although section 213 does not prohibit co-operation of two or more railroads in a joint acquisition, the three railroads therein applicant have such divergent interests that co-ordination of rail-highway transportation could better be accomplished through completely controlled companies, and that at this stage of motor carrier development it is not consistent with the public interest for three major railroads jointly to enter the trucking field in the unrestricted manner proposed.

Uniform System of Accounts

A uniform system of accounts was prescribed for class I motor carriers of property and class I motor carriers

of passengers. For accounting purposes carriers were classified in three groups as follows:

Class I, (carriers whose gross revenues from transportation services aggregated \$100,000 or over annually.)

Class II, (carriers whose gross revenues from transportation services aggregated \$25,000 or over annually, but less than \$100,000.)

Class III, (carriers whose gross revenues from transportation services aggregated less than \$25,000 annually.)

Systems of accounts have not as yet been prescribed for class II and class III motor carriers. Effective regulation of the accounting practices of these classes of carriers requires educational work, which, because of inadequate appropriation and personnel, we are not at present equipped to undertake.

Applications Filed

The year covered by this report is the third full year in which we have been receiving applications for certificates, permits, and licenses. During the current year, the number of such applications filed since the effective date of the act increased from 89,446 to 93,364. Much progress has been made in the disposition of applications for certificates and permits and the determination of the operating rights of motor carriers subject to our jurisdiction, as will be observed from the following table:

Grandfather applications filed prior to February 12, 1936.....	80,925
Grandfather applications filed after February 12, 1936.....	5,647
Applications for authority to institute new operations.....	6,792
Total applications received.....	93,364
Applications approved	20,617
Applications denied, dismissed, or withdrawn.....	42,670
Applications pending	30,077
Total	93,364

The applications approved include both grandfather applications and applications for authority to institute new operations. We approved the 20,617 applications either because we found that the applicants were in bona fide operation on the respective grandfather dates or, in the case of applications to institute new operations, because we found that the proposed new operations by common carriers were required by public convenience and necessity, and proposed operations by contract carriers were consistent with the public interests.

We denied 42,670 applications either because we found the carriers were not in bona fide operation on the respective grandfather dates or had ceased operations thereafter, or in applications to institute new operations, that they were not required by public convenience and necessity in the case of common carrier applications, or were not consistent with the public interest in the case of contract carrier applications. Field investigations on all except 67 grandfather applications have been completed, but hearings will be required on many consolidated grandfather applications and also on applications for authority to institute new operations.

Law and Enforcement

The following table indicates the progress of the work of the law and enforcement section during the year:

Number of complaints received.....	3,474
Average filed per month since Nov. 1, 1937.....	286
Number of complaints closed (including a part of the 6,875 complaints received prior to Nov. 1, 1937).....	5,704
Average closed per month since Nov. 1, 1937.....	475
Number of complaints pending.....	2,258

Number of violations by type:

Operating without authority.....	2,406
Nonobservance of rates and charges on file.....	1,312
Unification without authority.....	25
Nonobservance of safety regulations.....	12
Insurance requirements	123
Accounting requirements	5
Miscellaneous	200

Total (including complaints charging more than 1 violation)

4,083

Complaints:

Investigations concluded and reviewed (including cases received prior to Nov. 1, 1937, but handled during the current year)	5,704
Under investigation by special agents or field staff, or awaiting investigation or other disposition.....	2,258

Total

7,962

Section of Safety

Further progress was shown during the year toward nation-wide uniformity in safety requirements for buses and trucks, based on our Motor Carrier Safety Regulations. A statement was issued as of September 1, 1938, showing that 18 states have adopted all or very substantial portions of the four parts of our regulations for application to intrastate operators; that 15 others have adopted various items of the regulations; and that 8 others, at their own request, have been provided with supplies of our Motor Carrier Safety Regulations for the use of their enforcement officers. It is apparent that our regulations have provided a material stimulus toward greater uniformity in certain fundamental safety requirements throughout the country.

A report was issued outlining information furnished by common and contract carriers relating to drivers of motor vehicles engaged in interstate or foreign commerce as of July 1, 1937. It contained many data not heretofore available on the characteristics of bus and truck drivers. Illustrative of the information in this report was the fact that only 34 per cent of these drivers had ever undergone a medical examination in connection with their employment, but that more than 98 per cent of them held a chauffeur's or operator's license in at least one state.

Despite the preoccupation of the field personnel of the Bureau with grandfather applications and similar duties, the section completed in large part its plans for enforcement of motor carrier safety regulations.

Section of Traffic

For the past two years the section of traffic has been engaged in carrying on a program of education of motor carriers, the goal of which is to obtain the preparation and filing of tariffs and schedules of minimum charges in such form that the applicable rates may be readily and definitely ascertained. This program has been successful to the extent that publications now being received from motor carriers generally show improvement over publications previously filed. However, it will be necessary to continue this phase of the work for some time because the carriers have not yet acquired sufficient experience to enable them to publish their rates and charges in a manner that is entirely satisfactory. Furthermore, changes in ownership and other factors are instrumental in continually bringing individuals into this field who are without or with but limited experience in such matters.

During the course of the year there have been received 72,795 tariff publications of common carriers of passengers and property, and 5,973 schedules of minimum charges of contract carriers of property. Of this total number we rejected or returned 2,347. We required the filing of contracts by contract carriers for our

confidential information. This section has received and indexed 9,619 such contracts during the year.

Powers of attorney and certificates of concurrence filed aggregate 18,317. Applications received seeking special permission to establish rates, fares, and charges on less than statutory notice, or waiver of certain of our regulations, numbered 5,507. Specific orders have been entered granting 4,392 and denying 1,039 of these applications. The remainder were disposed of otherwise. Correspondence relating to tariff and schedule construction in accordance with our regulations, promulgated under sections 217 and 218, consists of 44,418 letters received and 53,950 letters written. For our own use, as well as the use of other branches of the government and shippers, 5,934 rate memoranda were prepared. Ninety-four applications seeking authority, under the provisions of section 219, to establish rates depending upon or varying with released or declared values were received. Of this number 64 were granted, 4 were withdrawn, and 7 are pending, and the remainder disposed of informally. The number granted or disposed of informally includes some which had been received but not disposed of during the previous year.

Protests Filed

Changes in rates, fares, or charges have been protested and suspension requested in 787 instances. These protests filed by shippers, motor carriers, and railroads covered not only a large number of rate publications filed by the carriers, but in addition, there were certain instances where we suspended proposed changes in rates on our own motion.

Suspended	300
Refused to suspend.....	167
Publications rejected, requests for suspension withdrawn, protected issue withdrawn, or no grants for suspension.....	282
Total	749
Pending	38

Reconstructs Failed Ore Dock Wall at Cleveland

(Continued from page 187)

Preparatory to the reconstruction of the wall, the old structure was removed by light blasting and with pneumatic demolition hammers. This included also the removal of the damaged portions of the struts to a point where sufficient lengths of the original reinforcing steel were exposed to afford an adequate bond with the new concrete. The renewed portions of the struts vary in length from 21 ft. to 40 ft. and average 34 ft.

The concrete, which was obtained from a central mixing plant, was placed from a dump hopper handled by a crane. Except at the double struts, the wall was poured in 30-ft. sections, with the construction joints located at the mid-points between struts. At the double struts, 45-ft. sections of the wall were poured continuously. To avoid the necessity for dumping the concrete directly into the water that stood to a depth of several feet in the dock wall forms, it was deposited in the strut forms and allowed to flow by gravity into the dock wall. Where the new construction adjoins the existing wall, lengths of the rail reinforcing in the latter were incorporated in the new wall to act as dowels.

Bridging of Water Tunnel

At a point somewhat west of the mid-point of the dock wall, it was necessary to make provision for carrying it

across a 7-ft. brick water tunnel having an outside diameter of 9 ft. 4 in., which intersects the dock wall at an angle of 85 deg. 3 min. At the point where the tunnel passes under the dock wall the flow line is 67 ft. below mean lake level. To carry the dock wall across the tunnel a bridge was devised, which embodies three 14-in. by 14½-in. by 73-lb. H-sections as the load-carrying members. These beams, which have a clear span of about 23 ft., are embedded in the concrete in the lower portion of the dock wall and are supported at their ends on the tops of bearing piles. Each of the outside beams is carried at each end on two bearing piles on 3-ft. centers, while the intermediate beam rests on one pile at each end. At four points, the three beams are tied together by cross members which were formed by burning one of the 73-lb. H-sections in half along the longitudinal center line of the web. Each of these members is laid flange downward on the beams, two being located at opposite ends of the beams directly above the bearing piles and the other two at intermediate points.

All connections in the bridge are made with continuous arc welds.

While a city map was available showing the location of the water tunnel, which is circular in cross-section, the railroad, preliminary to the construction of the bridge, desired to find its exact position with reference to the



A Welder at Work on One of the Splices

dock wall. To do this, a six-inch pipe casing was driven to a contact with the tunnel at three points and, with data thus available showing the positions of these points, it was possible to develop the full cross-section with a high degree of accuracy.

The design and construction of the new dock wall was carried out under the direction of W. B. Wood, chief engineer—Central region of the Pennsylvania, and J. F. Leonard, engineer of bridges and buildings. D. L. Sommerville, assistant engineer, was in direct charge in the field. The contractor on the project was the American Construction Company, Cleveland, Ohio.

W. P. Kenney

Dies

Was a protege of James J. Hill and president twice during his 36 years with the Great Northern



William P. Kenney

WILLIAM P. KENNEY, president of the Great Northern, died on January 24 in St. Paul, Minn., after an illness of several months. Mr. Kenney's railroad career was associated with the Northwest where, as a protege of James J. Hill, he played an active part in the settling of the country and the development of traffic. As head of the traffic department and later as president, his motto was "The public be served," and as a result of the adherence to this principle he won for himself and his company the increasing confidence and good will of shippers and passengers. He helped induce immigration to western states, and, typical of his thoroughness and conscientiousness, supplemented his efforts with an intensive program of practical and educational assistance to farmers and patrons.

Under Mr. Kenney's presidency, the Great Northern instituted a number of steps in an effort to increase its traffic and as a result of his initiative as well as improvement in general business, its total operating revenues increased from \$55,549,246 in 1932 to \$94,942,292 in 1937. With this increase in operating revenues and a corresponding reduction in operating expenses, he transformed a deficit of \$13,405,439 in 1932 into a net income of \$10,089,920 in 1937. The operating ratio of the railroad was reduced from 82.19 per cent in 1932 to 67.09 per cent in 1933; 68.70 per cent in 1934; 61.66 per cent in 1935; 63.46 per cent in 1936 and 64.65 per cent in 1937. This ratio was bettered by only 24 of the 141 Class I railroads in the United States in 1937.

Mr. Kenney made a remarkable success of refinancing the railroad's funded debt and restoring a strong financial position. In 1935 he was confronted with the necessity of refinancing 7 per cent bonds due July 1, 1936, and totaling \$105,859,000. During 1935 the railroad purchased \$5,093,000 of these bonds from income, thereby reducing the amount to \$100,766,000 and later, in 1936, reduced the amount to \$99,422,400. With this record, Mr. Kenney approached the Reconstruction Finance Corporation and succeeded in securing its aid in the refinancing. The agreement provided that the Reconstruction Finance Corporation would acquire, on

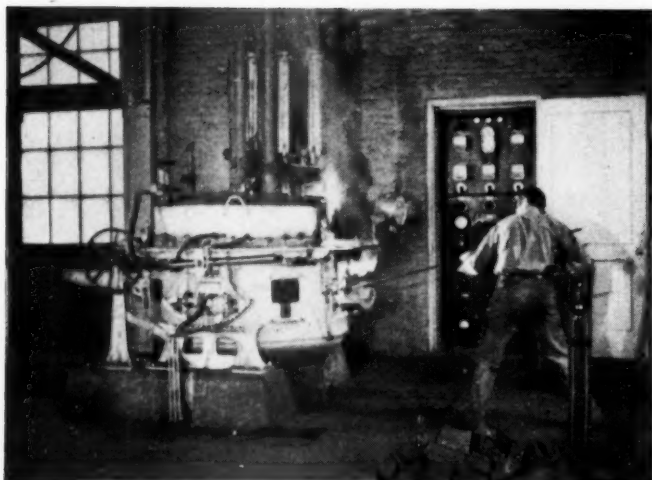
July 1, 1936, any new bonds not previously sold. As a result, the company issued 10-year bonds, bearing interest at 4 per cent and convertible into stock, one-half at the price of \$40 per share and one-half at the price of \$75 per share, and offered the bonds to stockholders, holders of the 7 per cent bonds and the public. A total of \$94,000,000 of the issue were sold to stock and bondholders, with the result that the R. F. C. was required to take over only \$4,935,000 of the issue, which it later sold to a bond house for \$5,158,407.

Again in 1937 he negotiated the sale of \$50,000,000 of additional non-convertible general mortgage 3¾ per cent bonds to provide for maturing underlying issues and to retire in advance of maturity \$40,000,000 of St. Paul, Minneapolis & Manitoba consolidated mortgage bonds due in 1943. As a result of this financing, he was able to reduce the annual interest charges paid by the Great Northern approximately \$3,000,000.

Mr. Kenney's rise was that from a newsboy selling papers in the streets of Minneapolis to a recognized traffic executive and a successful railroad president. Probably the best testimonial to his ability is a report on the Great Northern made by the Reconstruction Finance Corporation in 1937, which said, "The road has a well co-ordinated, effective and forward-looking management. Track and structures, motive power and other rolling stock have been adequately and fruitfully maintained. The conduct of transportation is efficiently handled. Expenses are well controlled. The property has very substantially improved since 1920, both from the standpoint of revision of physical characteristics, addition of needed facilities and the modernization of equipment, all of which were devised to promote economy and efficiency in maintenance and operation."

Mr. Kenney was born at Watertown, Wis., on January 10, 1870, and entered railway service in November, 1888, as a telegraph operator on the Chicago Great Western. During subsequent years he served as yard clerk, clerk in the local freight office at Minneapolis and clerk and stenographer to the general agent at Minneapolis, being appointed contracting agent in May, (Continued on page 194)

Chilled Wheels in Pictures



In the Laboratory—Metallurgical Research Is Facilitated by An Electric Furnace With a Capacity for Casting Two Full-Size Wheels

A COMPREHENSIVE review of the modern processes of producing chilled-iron car wheels was presented before the New York Railroad Club on January 20 by F. H. Hardin, president of the Association of Manufacturers of Chilled Car Wheels, in the form of a sound moving picture. The picture followed through the various steps in the production processes beginning with the preparation of scrap wheels for the cupola, through the preparation of the molds, manufacture of cores and the shaking-out and pitting of the castings, to their final finishing on the boring mill. It also showed a number of operations in the well-equipped research laboratory maintained by the association.

The story of the narrator which accompanies the film guides the reader in clear, non-technical language through the various steps in the processes and brings out the extent to which the employment of scientifically accurate controls are replacing rule-of-thumb methods in the industry.

In presenting the picture Mr. Hardin referred to some of the problems encountered in taking it and also answered a number of questions which the picture itself has raised in groups before which it had previously been shown. He spoke, in part, as follows:

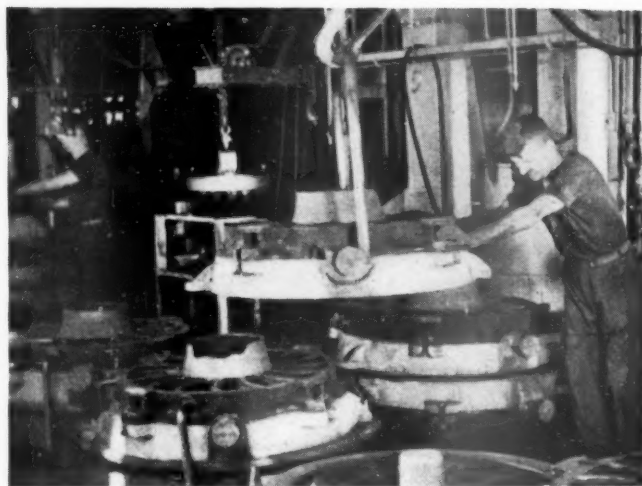
Mr. Hardin's Remarks

The members of this industry have been furnishing wheels to the railroads of America for 100 years. They are proud of that record. They are particularly proud of the advancement which has been possible in the past ten years, more particularly in the last five.

A great many factors have contributed to this advancement. Primarily it is due to the science of physical metallurgy by means of which the heretofore unknown laws which control the properties of these materials have been discovered and manufacturing processes brought in line with them.

The Association of Manufacturers of Chilled Car Wheels has recently closed a contract with the Battelle Memorial Institute, Columbus, Ohio, for a broad-gage research program into the field of the iron-carbon group

F. H. Hardin presents a movie before the New York Railroad Club showing modern production processes developed by the Association of Manufacturers of Chilled Car Wheels



In the Foundry—The Preparation of the Wheel Molds

of materials. F. K. Vial correctly refers to this as the field of romance and, indeed, it is; there are about as many grades of cast iron as there are stars in heaven. You change the iron-carbon relationship and produce a new material.

Some years ago cast-iron almost passed out of existence because of its unreliability as to tensile strength. Today, that situation is rapidly reversing itself. Where tensile strength used to be 18,000 to 22,000 lb. per sq. in., today the material is regularly being produced with from 60,000 to 70,000 lb.; 120,000 lb. is not unknown and there is no indication that that is the ultimate limit.

While there is always an open invitation to visit the plants of the industry and see what is going on, in the harried existence that we live today such an opportunity is very rarely offered. The film shown here tonight was designed with the thought of bringing the foundry into the office where you might conduct a complete inspection at your leisure and in comfort and cleanliness.

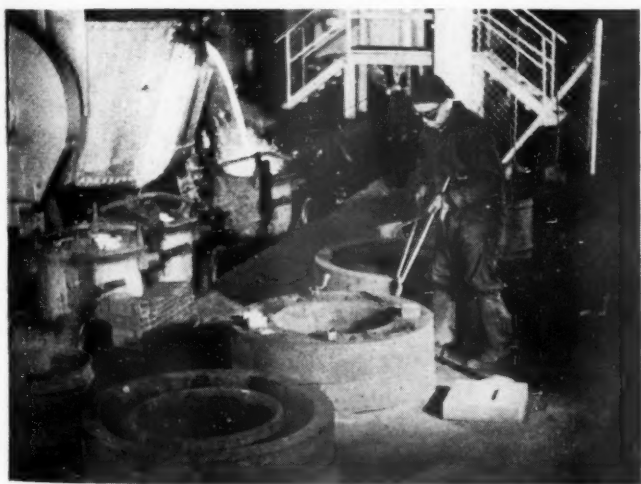
We started out with the idea of producing about 800 ft. of 16 mm. film which would take approximately 15 min. to show. A complete story of the chilled-iron car wheel was written. From that the producer wrote the script and, after a number of alterations, it was used as the basis for the photography, all of which was in the 35 mm. dimensions.

It became apparent the very first day that, if the script was followed, literally, we were going to leave some wide gaps in the film. The process, therefore, was reversed.

We took the picture and, instead of approximately 4,000 ft. that we originally intended, we had 8,000 ft. of 35 mm. film. The editing process then began under the supervision of an association representative. The film was reduced to 4,000 ft. and that in turn reduced to about 1,200 ft. of 16-mm. film, instead of the 800 ft. originally intended. This film takes about 27 min. to show.

In the few instances where the film has previously been shown questions asked have indicated that there are still a few gaps. Most prominent has been the question of the temperature at which the iron is melted and poured. As nearly as possible the iron is melted at 2,700 deg. F. It will be a little higher than that at the beginning and taper a little below that at the end of the heat. We pour the iron at a temperature of around 2,450 deg. F. Present A. A. R. standard wheels weigh 650 lb., 700 lb., 750 lb., and 850 lb., for cars of 30, 40, 50 and 70 tons' capacity, respectively.

Another question which always arises pertains to two recording instruments shown on the cupola in the picture. That is one of the recent developments of the association, and it is already out of date as shown. One of the instruments shown is a recording carbon-dioxide meter, the first, I believe, that has ever been installed on a cupola. The other is a recording air-volume meter. A cupola, in spite of its enormous size, is a very delicate and very finely balanced instrument. Its operation, particularly the control of the chill in the wheel, depends upon proper combustion. Since the picture was taken



Filling the Ladles Preparatory to Pouring—In the Foreground Test Pieces for Determining the Depth of Chill Are Being Removed from the Mold

the two instruments have been coupled up and are now operating as an automatic control. In other words, the air volume is varied to maintain a constant carbon dioxide.

In the picture you will see a broken wheel and an inspector with a scale measuring the depth of the chill. That was formerly the only method. It has been possible now to combine the physical, chemical and metallurgical characteristics and develop a scientific method of determining the depth and wear value of the chill. This method was already in existence when the picture was taken, but the time and space did not allow it to be included.

One of the primary defects for which wheels are removed are worn-through chills. With this method of instrumental chill determination that defect will be eliminated.

The unit annealing pit shown in the picture is one of the latest developments of the association research department, Mr. Vial being primarily responsible. It is known as the low heating capacity pit. The heat of the wheel itself is used in the annealing and heat-treating processes. In the old-style pits a whole battery was built and surrounded with sand so that they would hold the heat. Of course you got them hot but you could not cool them off. Hence, it was necessary to transfer the wheels from primary to secondary pits at high temperatures. The unit pits stand in the open by themselves surrounded by nothing but air. Each consists of a steel shell lined with a very highly efficient insulating material. The wheels are pitted at a very high temperature, the hub and tread temperatures are equalized well above the critical point and then they are cooled at a rate of 8 to 10 deg. per hour. No oil firing is necessary, no transfer of wheels is necessary. In intermittent operation this pit has a distinct advantage. No matter how long the wheels stay in the pit, they will not be over-annealed. They follow a predetermined cooling cycle.

Discussion

Several prepared discussions were presented after the picture had been shown. C. B. Peck, mechanical department editor, *Railway Age*, briefly reviewed the development of the modern chilled-iron wheel since the experimental introduction of the single-plate wheel 15 years ago. During this period, he said, there was evident a gradual shifting of the initiative in wheel developments from the Wheel Committee of the Mechanical Division of the Association of American Railroads to the Association of Manufacturers of Chilled Car Wheels. This was not, he said, because of any reduction in the sense of responsibility or in the quality of the work of the Wheel Committee of the Mechanical Division, but was the result of a growing aggressiveness on the part of the manufacturers' association. This has been shown by the requests for changes in the wheel specifications since 1930, all of which reflect a tightening up of foundry practice and a lifting of standards of quality for the



A Battery of Unit Annealing Pits in Which the Wheels Are Cooled at the Rate of Eight to Ten Degrees an Hour for Three Days Before Removal for Final Air Cooling

product of the industry. Considering the fact that the present drive for complete uniformity of the product of the manufacturers' association is just getting well started, the future usefulness of the chilled-iron car wheel, he

said, seems more assured today than at any time in its history.

H. W. Faus, engineer motive power, New York Central, spoke from his experience as former engineer of tests. He cited experience on the N. Y. C. with the modern single-plate wheels, the application of which began in 1927, following their admission in interchange by the then A. R. A. During 1926 chilled-iron car-wheel failures caused a total of 86 derailments. Such derailments, he said, have decreased steadily since then until, in 1938, there were but seven, and only four of these were single-plate wheels. All of the double-plate wheels that failed and caused derailments were from 14 to 18 years old.

Mr. Faus presented an estimate of wheel-mileage life on the N. Y. C. based on the method of calculation suggested by the Federal Co-ordinator's Mechanical Advisory Committee. This showed an average life of about 92,800 for the years 1927 and 1928, when practically all wheels retired were of the old double-plate design, and an average of about 110,300 for the six-year period 1929-34, inclusive, when the single-plate wheels were gradually coming into use. More recent evidence indicates that the average life of the single-plate wheel, with the possible exception of those on 70-ton cars, is substantially in excess of 120,000 miles.

Mr. Faus said that the inspection department set up by the manufacturers' association appears to be so safeguarded as to inspire the confidence of the customer. Since the inspectors are responsible to no one manufacturer but take their orders only from an officer whose primary concern is to see that high standards of quality are set and adhered to, he thought the railroads might well find that their own inspection and tests of chilled iron wheels could be largely curtailed, if not entirely eliminated.

W. R. McMunn, superintendent rolling stock, Merchants Despatch Transportation Company, reviewed the experience of that company following the adoption of the single-plate wheel as standard and in establishing the permissible 50 per cent braking ratio for refrigerator cars. During the years immediately following the admission of the single-plate wheel to interchange, one of the principal difficulties lay in the heavy demolition programs of many of the railroads, which resulted in a surplus of second-hand double-plate wheels that were disposed of by applying to foreign cars in place of the single-plate wheels standard to the cars. This situation was finally corrected by a rule placing a scrap value on the double-plate wheels substituted for the new single-plate type.

Mr. McMunn described a five-year test, in which comparisons were made between 1,000 new refrigerator cars with a braking ratio of 60 per cent and another 1,000 cars with a braking ratio of 50 per cent, which began in 1931. All cars were equipped with single-plate

chilled-iron wheels and were in substantially the same service. For the duration of the tests 818 wheels were removed for all types of tread defects from the cars having 50-per cent braking ratio and 52 for other than tread defects. From the cars with the 60-per cent braking ratio, 2,496 wheels were removed for tread defects and 62 for other than tread defects. But 20.9 per cent of the wheels were removed for all causes from the cars with 50-per cent braking ratio, while 50.4 per cent of the wheels were removed from the cars having the 60-per cent braking ratio. Since the adoption of the present rule with respect to braking ratio, Mr. McMunn said, wheels requiring renewal because of rim and flange defects are relatively few on the Merchants Despatch cars.

To supplement the data concerning wheel life customarily developed on the basis of time elapsed between application and removal, Mr. McMunn cited the installation of 50 pairs of chilled-iron wheels which were applied to equipment assigned to the meat trade, service records for which were kept on a mileage basis. These cars operate in high-speed trains and average between 70,000 and 80,000 miles per year. The service of those wheels averaged over 100,000 miles and, in a number of cases, was as high as 125,000 to 154,000 miles. With the improvements in foundry practice now taking place, he expressed the opinion that the average chilled car-wheel life in the near future might be closely comparable with the above maximum mileage.

W. P. Kenney Dies

(Continued from page 191)

1892. During part of 1899, he served as contract agent of the Empire Line and in the latter part of 1899 was appointed chief clerk in the general freight office of the St. Paul & Duluth, now a part of the Northern Pacific. He was appointed chief clerk in the general freight office of the Northern Pacific in July, 1900, and in September, 1902, was appointed to a similar position on the Great Northern. He was promoted to assistant general freight agent in April, 1903, and was promoted to assistant to the fourth vice-president in January, 1905.

Mr. Kenney was made assistant traffic manager in May, 1909, and in September, 1911, was promoted to general traffic manager. He was appointed vice-president in charge of traffic in October, 1912, and was later made vice-president and director of traffic. While holding this position he was also a director and a member of the executive committee of the Great Northern. On February 12, 1918, he was elected president of the Great Northern and during the War served as federal manager. In 1920, he resumed his duties as vice-president in charge of traffic and on January 1, 1932, again became president.

* * * *



This Heavy Duty Flat Car Having a Maximum Capacity of 397,600 lb. Was Recently Designed and Built by the Pennsylvania at its Altoona Works and Exhibited at Various Points on the System. The Body Is a Single Steel Casting to Which Steel Floor Plates Have Been Riveted

Thomas Drever Elected President American Steel Foundries



Thomas Drever

Has participated actively
in direction of several
other companies while
serving as vice-president
and treasurer

THOMAS DREVER, vice-president and treasurer of the American Steel Foundries, Chicago, was elected president at a meeting of the board of directors at New York on January 19, to succeed George E. Scott, who died on January 11, as reported in the *Railway Age* of January 14 and 21. Mr. Drever becomes president after active participation in the direction of the company during his 24 years' association with it and with the experience gained as a directing officer of other companies. While president of the Wahl Company, Chicago, he increased its operating net from a deficit of \$49,207 in 1924 to a profit of \$323,074 in 1928. At the same time, he brought about a more co-operative relationship among the manufacturers of this field with a resulting stabilization of the industry.

Mr. Drever was born in Edinburgh, Scotland, on May 2, 1882, and began his business career in that city in 1905 as a chartered accountant. In the same year he came to the United States and became an accountant in New York. From 1907 to 1910 he engaged in the same work at Boston, Mass. In the latter year he was appointed comptroller of the American Steel Foundries at Chicago, which position he held until 1924 when he was granted a leave of absence from this company to become president of the Wahl Company. In 1929 Mr. Drever returned to the American Steel Foundries as secretary and treasurer. Later in that year he was made a director and a member of the executive committee. In 1932 he was elected vice-president and treasurer. Since 1929 he has been chairman of the board of the Wahl Company; vice-president and a director of the Griffin Wheel Company, Chicago, and a direc-

tor and a member of the executive committee of the General Steel Castings Corporation, Eddystone, Pa.

He is a member of the Chicago Club, the Tavern Club and the Glenview Club. He also takes an active interest in Chicago and Glencoe, Ill., civic affairs.

American Steel Foundries was incorporated in 1902 to acquire a group of casting companies including the Sargent Company, Chicago, the Reliance Steel Casting Company, Pittsburgh, Pa., the Franklin Steel Casting Company, Franklin, Pa., the Leighton and Howard Steel Company, East St. Louis, Ill., the American Steel Foundry Company, Granite City, Ill., and the American Steel Casting Company, Chester, Pa. Since that time it has expanded its activities and has taken over or acquired a controlling interest in a number of other companies among which are the American Steel Bolster Company, the Simplex Railway Appliance Company, the Griffin Wheel Company, the Damascus Brake Beam Company and the Galesburg Malleable Castings Company. Its latest acquisition is a foundry plant at McKees Rock, Pa., from the Pressed Steel Car Company, Inc., in 1937.

Its steel castings foundry plants are located at Granite City, Ill., Alliance, Ohio, East St. Louis, Ill., East Chicago, Ind., Verona, Pa., and Newark, N. J. The total annual capacity of these plants is 295,800 tons of steel castings. In addition, a malleable iron castings foundry, having an annual capacity of 4,200 tons, is located at Galesburg, Ill. Fabricating and machinery plants having a total annual capacity of approximately 43,400 tons are located at Hammond, Ind., and Cleveland, Ohio. The company and its subsidiaries employ more than 6,000 persons.

Omnibus Transport Bill Hearing

Interstate Commerce Commissioner Splawn the first witness
as Lea measure is taken up by House Committee

WASHINGTON, D. C.

HOUSE interstate and foreign commerce committee hearings on the omnibus transportation bill introduced by that committee's chairman, Representative Clarence F. Lea of California, got under way on January 24 with Interstate Commerce Commissioner Walter M. W. Splawn, the commission's 1938 chairman, as the first witness. Provisions of the bill, H. R. 2531, which calls itself the "Transportation Act of 1939", were outlined in the *Railway Age* of January 21, page 154.

Meanwhile another White House railroad conference was held on the eve of the hearings' opening session. It was attended by members of the committee-of-six, Commissioner Splawn, Representative Lea and Senator Wheeler of Montana, chairman of the Senate committee on interstate commerce. This was the second White House railroad meeting within a week, since President Roosevelt had conferred on January 19 with Messrs. Wheeler and Lea, and later the same day with Carl R. Gray, vice-chairman of the Union Pacific and one of the three management members of the committee-of-six.

Upon emerging from the larger of these two White House conferences on the evening of January 23, Senator Wheeler said that the conferees had agreed to try to work matters out so that some common understanding will be reached. The process, he went on, will perhaps be the introduction of legislation followed by study and revision in committee. And the Senator thinks it is quite likely that some broad-gauge transport legislation will be enacted at this session. The report of the committee-of-six will be used as one basis for drafting legislation, the Montanan said, as he revealed that he plans to confer with Congressman Lea.

With respect to his own position, Senator Wheeler said that he is not in "violent disagreement" with the Lea bill. He plans to introduce in the Senate bills to reorganize the I. C. C. and to give that body authority to regulate water carriers. As the Senator sees this problem, either water carriers should be regulated or the railroads should be turned loose. However, he still opposes repeal of the long-and-short-haul clause of the Interstate Commerce Act's fourth section; and he wants to give further study to proposed changes in the rate-making rule.

The hearings on the Lea bill opened under "standing-room-only" conditions, the audience including members of the committee-of-six, other railroad officers and labor leaders and representatives of shippers and various types of transport. J. J. Pelley, president of the Association of American Railroads, was there, and so also was Ted V. Rodgers, president of American Trucking Associations, Inc. More than 20 of the committee's 25 members were on the bench.

In his opening statement Chairman Lea referred to the reports of the Splawn-Eastman-Mahaffie committee and of the committee-of-six, explaining that his bill is "outgrowth of these efforts of the Administration" to secure legislation to aid the transportation industry. After Commissioner Splawn concluded, the chairman went on, the committee would hear one management member and one labor member of the committee-of-six,

such presentations to be followed by those of other interested parties. Also, Mr. Lea said that the hearings will be "broader than the bill" which has not been specifically endorsed by the President or by the committee on interstate and foreign commerce.

"This committee," Mr. Lea concluded, "will, to the extent of its ability, prepare transportation legislation with a view of dealing justly with our various types of transportation; so far as there is a practical legislative remedy, endeavor to relieve the economic stress from which these agencies now suffer; and attempt to serve the public interest of the country by this legislation. To aid us in that purpose, we need and invite constructive suggestions in this hearing."

Splawn Not Speaking for I. C. C.

Before getting into his explanation of the bill, which he said he endorsed except for a reservation as to the size of the Interstate Commerce Commission, Commissioner Splawn traced the history of transportation in this country since colonial times and introduced a series of exhibits giving data designed to show the magnitude of the transportation set-up in the United States. As Mr. Splawn later pointed out he was not speaking for the I. C. C. from which, Chairman Lea added, the committee has asked a report on the bill and any suggestions for amendment.

In discussing his exhibits Commissioner Splawn told the committee that its problem was not one of reducing the transportation machine to 1938 needs, but it was rather one of conserving that machine for the future. He thinks that "cut-throat" competition, "blinded by needs of the moment" is destroying or impairing investment that will be needed in a few years. In the latter connection the witness had previously said that he anticipated that the aggregate traffic from new small enterprises will be substantial, despite the fact that there is nothing in sight comparable to the big tonnage-producing new enterprises of the past generation. The commissioner warned that the committee must face a dynamic, a changing transportation situation—the American people don't "stay put," they "refuse to be stabilized."

In one of his exhibits, Commissioner Splawn showed the rates of return earned by railroads in 1937 and in the 12 months ended with October, 1938. He called the rate of return "very important" because private capital invested in transportation is "irrevocably committed." The purpose of his exhibits, he said again was to enable the committee to judge the magnitude of the industry, and to appreciate how far-flung are the "conflicts that are going to appear here." He added that there are "rate wars all over the country," which are impairing "not merely maintenance but capital investment itself." Meanwhile the commissioner had pointed out that a level of traffic 10 to 20 per cent above 1937 would greatly change the railroad picture, and one of his exhibits noted that "the recovery in business that has taken place since May offers hope for a considerable amelioration of railroad difficulties."

Coming to his review of the bill, Mr. Splawn referred first to the "Declaration of Policy" which he thought the committee would want to study carefully in view of the fact that the entire bill is designed to carry out that policy. The proposed "Transportation Administrator", the witness said, might be called a "Conservator" because of his duty to find places where waste could be eliminated. Meanwhile, he went on, this part of the bill also places a positive duty on transport agencies to eliminate waste, and to abandon rate wars. As Mr. Splawn sees the Administrator's role it would be one of a "detached officer undertaking to bring about positive action."

The I. C. C. and Reorganizations

The provision for a special court to handle reorganization cases, the witness explained, would take from the I. C. C. the duty of adjudicating private rights, leaving the regulatory body to aid the court when requested to give an opinion as to the fixed charges or the capital set-up which a property might be expected to support in the future. Commissioner Splawn was not impressed by the argument that this change would cause further reorganization delays; he thinks that the new court, composed of experienced judges, would take over and carry on. He went on to refer to criticism of the I. C. C. for its alleged failure to expediate reorganization cases, pointing out first that the last seven years have not been "propitious" ones from the standpoint of effecting financial reorganizations. He explained in this connection that equity holders, contending that better times are in prospect, have objected to reorganizing on the basis of recent earnings; that it has been difficult to finance in recent times and that the commission has had to adjudicate private rights. All in all, however, the commissioner thinks the I. C. C. has done a "good job" on reorganizations—"out of 27 cases, 20 have either gone to final or proposed reports." However, Mr. Splawn added, everyone realizes that the end is "far distant yet."

Coming to the bill's section dealing with Reconstruction Finance Corporation loans, the witness cited what he called a "very interesting statement" in the survey of transportation in the United States which the committee-of-six filed with its report. This statement was to the effect that if the railroads were now operating the same number of serviceable units of equipment that they maintained in 1926, and could secure from each unit the present average performance, they could handle 40 per cent more freight traffic than they actually handled in 1937, and 13 per cent more than the 1929 peak. Mr. Splawn asked the A. A. R. to estimate the cost of restoring this 1926 equipment situation, and the answer was "a little less than two billion dollars"—a figure which the I. C. C. Bureau of Statistics agrees is the most reliable that could be obtained. Mr. Splawn closed his discussion of loans with the suggestion that the committee can determine proper limits after receiving evidence on equipment requirements of the railroads. His brief reference to the proposed elimination of land-grant rates suggested that the federal government should not insist upon being a preferred shipper when it has forbidden undue preference in rates to others. Also, he pointed out how "many" feel that the government has been compensated for the land grants, an argument which becomes "more persuasive" by reason of the fact that western railroads which got no land must meet the competition of land-grant rates.

In connection with the proposed regulation of water carriers, Mr. Splawn suggested that the committee may want to include contract carriers. The section giving the I. C. C. power over minimum rates of all carriers

he considers "one of the most important features" of the bill. Chairman Lea said the same in the statement he issued when he introduced the measure.

As to the proposed 19-man Interstate Commerce Commission, Commissioner Splawn wants to keep an open mind so that he may study the proposal along with other members of the commission. He went on to say that Chairman Lea had thus set up his reorganized commission because of a conviction that the appeal division should be manned by members not serving on other divisions. As the witness understood the thought of the chairman it was that those who review decisions should be persons who had not participated in the original order.

Representative Bulwinkle, Democrat of North Carolina, wanted to know why the assignment of commissioners to divisions was left to the President. Commissioner Splawn replied that such a provision would permit the President to appraise candidates for appointment in the light of the duties to be performed. When Mr. Bulwinkle said he thought the assignment of members might better be left with the I. C. C. chairman, the witness reminded the North Carolinian that he was the "legislator," adding that if Mr. Bulwinkle thought his proposal were better than the bill's then such a set up would surely "turn out for the country's best interest." To the same questioner Mr. Splawn explained that no appeal was provided from finance division decisions because the latter would be largely administrative and could readily be appealed to the courts. Also, the witness thought that the work of the proposed divisions was clearly defined in the bill, in which connection he told Mr. Bulwinkle that a pooling case would come before the rate division.

Asked if he believed in the rotation of duties among commissioners, Mr. Splawn replied that his answer would depend on the circumstances and the commissioner in a particular case. He added that present duties are now "breaking down two or three commissioners" who would not want their names mentioned—"but we're putting quite a load on them and it's not good for them or for the country." He agreed with Representative Halleck, Republican of Indiana, that at the outset the President could assign five of the eight new commissioners to the appeals division. Mr. Halleck also wanted to know what bearing the words "within the commission" had on the status of the proposed Administrator. To this question Mr. Splawn replied that they meant that the Administrator would "have an office in the commission building."

Representative Wolverton, Republican of New Jersey, brought out Commissioner Splawn's personal endorsement of the bill's objectives, with the above-mentioned reservation as to the commission's size. Also, Mr. Wolverton was interested in how far the bill went in carrying out recommendations of the committee-of-six. Mr. Splawn preferred to let the committee-of-six speak for itself, but he did say that the bill contained about all of the recommendations of the Splawn-Eastman-Mahaffie committee, and only part of what the committee-of-six recommended.

The National Industrial Traffic League's executive committee and special committee on the railroad situation, at a joint meeting in Washington last week, adopted a resolution calling a special meeting of the League to be held in Washington for the purpose of considering the Lea bill and other transport legislation such as that which Senator Wheeler is expected to introduce. Also adopted was a resolution opposing the Lea bill's provisions for a reorganization of the I. C. C. The special League meeting will be held at a date to be fixed by the officers.

NEWS

Oppose Montreal Plans of C.N.R.

Conservatives in Ottawa allege purpose of expenditure is to help win votes

Announcement by the Canadian National that it would immediately begin work to complete the terminal at Montreal, at a further cost of \$12,600,000, has caused a political storm at Ottawa. Conservatives in the House and Senate have charged this to be an electoral game, that as this is to be a general election year the outlay of a large sum in Montreal will help to keep Liberal hold on the seats in that city. A Conservative member of the House, Joseph Harris of Toronto, predicted the sum to be spent additional to the \$15,000,000 already spent, would probably be \$25,000,000 when the job was finished.

Arthur Meighen, Conservative leader in the Senate, did not refer to the terminal project but he did lament the showing of the publicly-owned road in 1938. Later Raoul Dandurand, government leader in the Senate, pointed out that the \$15,000,000 already spent on the Montreal terminal was not productive and was costing plenty in interest charges. It was decided wise to spend more so that the project would be productive, so that the railway could use the viaduct and the station and other features of the plan.

Senator Meighen's brief reference to the plight of the C. N. System was as follows:

"The Throne speech omits altogether the Canadian National Railways. That distinguished entity does not appear on the pages of the speech at all—on any of the first five pages anyway. Well, one does not have to look far to know why that subject is entirely forgotten. It is because the Canadian National Railways have had one of the saddest years of their history. Without doubt, the deficit is going to be \$11,000,000 more than it was last year. I ask the honourable leader of the Government to watch now and see if it is not a couple of million worse than that, although it is only a few short months since we listened to some of his leading officers explain why the first three months' operating results were worse than their rival's and prophesy that an improvement would be made in the last nine months. The returns for the last nine months were worse than those for the first three. And whereas the Canadian Pacific net operating revenue is reduced from the year before by about \$3,900,000, the Canadian National Railways'

is reduced by about \$11,800,000—almost four times the net reduction of the Canadian Pacific. Such is the story that is to be told this year, a story omitted entirely from the Speech from the Throne.

Senator Dandurand read a statement from the Canadian National in justification of the decision to finish the Montreal terminal at a cost of \$12,600,000 in part as follows:

"It is the considered judgment of the Canadian National Railways that the best interests of the railway and of the public will be served by a co-ordination of the terminals of the company at Montreal in the manner decided upon. No engineering project has been more fully examined than that for the creation of a Central Station on the Dorchester Street site.

"The substitute plans for taking the lines of the Canadian National into Windsor Street station were also closely studied by independent engineering authority and found to be incompatible with securing the efficiency and economy sought for, and providing for the growth and development of the city.

"In considering the possibility of using Windsor Street station it became evident that only a portion of the trains could be routed into that station without a serious increase in mileage and slowing down of schedules. The problem of trains from the west presented little difficulty, but the routes of all trains from the east using Bonaventure Station would have to be increased by twenty-one miles and passengers on these trains, after coming within sight of Montreal at St. Lambert, would have to be taken twenty-six miles by a circuitous route to cross the St. Lawrence River at Caughnawaga."

One Car and More Power Added to City of Denver

An all-room sleeping car and extra power have been added to the two City of Denver streamline trains operated by the Union Pacific-Chicago & North Western between Chicago and Denver, Colo. The all-room car contains four roomettes, three compartments, one drawing room and four bedrooms. The existing 2,400 hp. Diesel-electric locomotives on these trains have been converted into 3,600 hp. locomotives by the addition of another 1,200 hp. unit.

Coincident with this action, one City of Denver will have attained 1,000,000 miles of service, when, on its westbound trip from Chicago on January 29 it reaches a point two miles west of Darr, Neb. The eastbound train will reach its millionth mile at Ogden, Iowa on the morning of January 30.

Transport Clinic Meets Third Time

U. S. C. of C. group drafts comprehensive program for rail rehabilitation

The National Transportation Conference, which was called by the Chamber of Commerce of the United States to draft a program for the rehabilitation of the railroad industry, held its third meeting in Washington, D. C., on January 23 and 24 and announced its recommendations. The conference, which was presided over by George H. Davis, president of the Chamber, put off until a later meeting whatever action it may desire to take on the proposal to set up a separate transportation authority as proposed by other groups studying the railroad problem.

At its closing session, the National Transportation Conference, as an overall recommendation, adopted the following general declaration of policy:

"It is the sense of the conference that the present provisions of the Interstate Commerce Act should be supplemented to include language which would make it the duty of the Interstate Commerce Commission, in passing upon appropriate questions, to give consideration to the need of the carriers for revenues sufficient to assure that their credit position will be strengthened to a point where the return upon the capital invested in the useful facilities of the carrier systems of the country will be sufficient to attract continually the private capital needed for the maintenance and development of such systems so as to be available at all times to serve the public needs properly."

While most of the conclusions agreed upon by the conference call for legislative action, there were some suggestions advanced which the conference believes the railroads themselves might put into effect. The legislative remedies proposed, by the conference, it was announced, will be submitted immediately to the Congressional committees now considering railroad legislation.

The conference's program begins with a recommendation that Congress should "adopt a strong declaration of purpose to preserve and promote private ownership and operation of railroads."

Specific remedial measures are classified under five general headings: Railroad Rate Provisions; Federal Financial Aid; Consolidation, Coordinations and Abandonments; Financial Reorganization of Rail-

(Continued on page 207)

Truckers and RRs Urge Equal Rates

Operators in Pennsylvania
confer on competitive rate
situation in that state

A proposal that there be identical charges for railroad or truck transportation when the service rendered is the same was agreed upon by representatives of trucking companies and railroads operating in Pennsylvania meeting in Harrisburg, Pa., on January 24, with members of the state Public Utility Commission to discuss the competitive rate situation in the state. Suggested by commission members as a possible solution to the chaos of transportation charges now obtaining in Pennsylvania, the conference, it is hoped, will constitute the first in a series of "harmony meetings."

Commissioner R. J. Beamish, as the chief representative of the utility body, told the conferees that of 100,000 motor carrier operators in the state, only 17,000 are under regulation, and charged widespread violation of the law by "chiselers." Many truckers, he said, are engaged in uneconomic hauls, which ought not to go by highway. He announced that the commission is shortly to open hearings to determine minimum rates for all motor carriers, "starting with dump trucks" and continuing in order with movers of household goods, contract carriers and common carriers.

Of especial importance was Mr. Beamish's request that the joint committee of railroad and truck representatives together propose a basis of rate schedules for common and contract carriers and that they continue to hold such conferences under alternating chairman from the railroad and highway carriers. A second parley has been scheduled for February 24 at Harrisburg.

The joint committee made public the following resolution: "Subject to the approval of all concerned, it is proposed by this committee that there should be uniformity of rates for truck or rail transportation, and uniformity of rates is understood to mean the payment by the shipper or consignee of the same aggregate charge for a given service by highway or rail transportation."

Less carload and less truckload rates in the state of Pennsylvania should be on the basis prescribed by the Interstate Commerce Commission in Docket 15879 (including recent increase) which are generally observed by the rail carriers and by common carriers by motor vehicle in the territory east of the Mississippi and north of the Ohio river. Ratings should be uniform. Such rates may include pick-up and delivery, or allowances in lieu thereof, under substantially similar rules to be published by both the motor and rail carriers. There should also be uniformity of rates and minima on volume or carload shipments."

The committee also released a statement of policy which denounced "ruthless com-

petition" and expressed favor for "correct principles of rate making" which tend to increase freedom of movement of traffic in general. "The representatives of rail and highway transportation meeting here at the suggestion of the Pennsylvania Commission realize full well the need for stabilizing rates and the abolition of destructive competition between the two industries. There remains only an agreement upon the method or means of achieving the end. We realize that this cannot be done overnight, but somewhere, sometime, we must begin and this, we think, is the time and place."

Railroad representatives were: Chairman, Fred Carpi, general freight agent of the Pennsylvania at Philadelphia, Pa.; A. C. McIntyre, freight traffic manager of the Lehigh Valley at New York; L. W. Horning, regional director, Eastern region, Competitive Transportation Research, Association of American Railroads at New York; H. G. Settle, assistant freight traffic manager of the Baltimore & Ohio at Baltimore, Md.; E. J. Zschirpe, assistant to vice-president of freight traffic of the New York Central at New York; L. R. Jones, general freight agent of the Reading at Philadelphia; and A. B. Craig, general freight agent, Central of New Jersey, at New York.

Motor truck representatives were: Chairman, J. P. Clark, Horlacher Delivery Service, Inc., Philadelphia; H. R. Duffy, Aero Carrier Corporation, Forty-Fort; J. R. Bingaman, Bingaman Motor Express Company, West Reading; W. A. Sutherland, general chairman, Intrastate Motor Carrier Rate Board of Uniformity of Pennsylvania, Allentown; Joseph Garner, Central Storage & Transportation Co., Harrisburg; J. L. Kirby, Kirby Transfer & Transportation Co., Pittsburgh; and Edward Gogolin, Pennsylvania Motor Truck Association, Harrisburg.

Rock Island Awarded Damages in Crossing Derailment

The Chicago, Rock Island & Pacific was awarded damages in the sum of \$3,252 against the Herman Oil Company, Fremont, Neb., whose truck loaded with fuel oil ran into a Rock Island freight train at Riley, Kan., derailing the train and causing the destruction of two cars and their contents in the fire that followed. The jury awarded the railroad damages not only for the value of the property destroyed, but also for the cost of material and labor necessary to repair the tracks and open the line to operation.

Southern Authorized to Cancel Commutation Rates

Cancellation of commutation passenger fares between Washington, D. C., and stations on the line of the Southern in the state of Virginia have been found justified, according to a decision of Division 4 of the Interstate Commerce Commission. At the hearing the passenger traffic manager for the Southern testified that with the increase in improved highways, bus schedules and the use of passenger automobiles, local traffic over the Southern had practically vanished, and with it, commuter travel.

Roosevelt Names Amlie to I. C. C.

Sponsor of a "human rights"
amendment to Constitution
would succeed Meyer

Thomas R. Amlie, Wisconsin Progressive and former member of the House of Representatives who in 1937 sponsored a "human rights amendment" to the Constitution, has been appointed by President Roosevelt to be a member of the Interstate Commerce Commission for a term expiring December 31, 1945. Mr. Amlie, whose name was submitted to the Senate on January 23, would succeed Balthasar H. Meyer, a commissioner since January, 1911.

At his January 24 press conference, the President parried a question as to what plan for railroad rehabilitation Mr. Amlie would bring to the commission, and was measurably irked at another asking what qualifications entitled Mr. Amlie to the appointment. Mr. Roosevelt said that only the Almighty could answer the first question, while he rebuked the asker of the second, saying that he would not have sent Mr. Amlie's name to the Senate if he had not believed him qualified. The President added that the incident marked the first time that a question of that nature had been asked at a White House press conference, although he did point out that he was required to pick a non-Democrat, and Mr. Amlie qualified on that score. Meanwhile there was critical comment on the appointment from a few senators while it was scored in a debate in the House on January 24. On the following day both houses of the Wisconsin legislature passed similar resolutions requesting the President to withdraw the nomination, and calling upon the Senate to deny confirmation if the President refuses.

Mr. Amlie, whose record is generally regarded as left wing, was defeated last year in the Progressive primary for a Wisconsin senatorial nomination. His proposed "human rights amendment" was offered as H. J. Res. 256 during the first session of the Seventy-fifth Congress on March 2, 1937. It set forth its purpose as being one designed to permit Congress "to take action necessary to bring to the people of the nation the abundance which full capacity use of its natural resources, its machinery of production, and the skill of its people make possible." The proposed amendment went on to assert among other things that Congress "shall have the power to enact laws providing for ownership, operation and management, through instrumentalities of the government of the United States, of business, manufacturing, commerce, industry, and banking, and shall have the power to purchase and condemn by eminent domain such enterprises." After its enumeration of further specific powers proposed to be given to Congress the suggested amendment closed with the stipulation that "Nothing contained in the fifth and fourteenth articles of amendment of this constitution relative to the taking of

property without due process of law shall be construed to impose any limitation on the legislative power of the Congress or of the legislatures of the several States



Harris & Ewing

Thomas R. Amlie

with respect to any of the subjects referred to in this article."

In a speech delivered in the House on November 24, 1937, Mr. Amlie advocated government spending as a depression cure, and characterized as "utter drivel" the argument that business must be encouraged in the interest of promoting recovery. In the latter connection, Mr. Amlie asked how it could be expected that business men would expand their facilities when the existing plant capacity was unused.

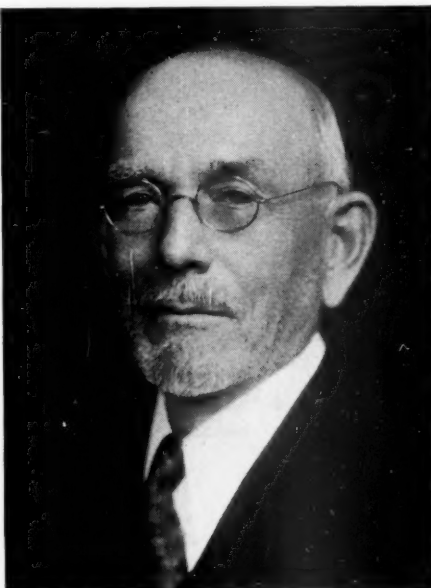
"I question very much if our present economic system can continue to operate here after free enterprise has ceased to be the economic system prevailing in other countries," Mr. Amlie said at another point in that address. "I believe," he went on, "that we are moving to a point when the economic system will be changed. . . . So when I advocate a conscription of wealth, if that becomes necessary, I do not believe that I am advocating anything particularly revolutionary." Mr. Amlie continued to develop the idea that all taxation is conscription of wealth. He felt that "the welfare of the people" should come before "any property rights of an individual." As Mr. Amlie saw it at the time there were two alternatives—continued government spending or passage of the proposed Industrial Expansion Act, which had been introduced by him in conjunction with other congressmen, including former Representative Maverick of Texas. This Industrial Expansion Act called for a national plan for the operation of all industry at "optimum" capacity.

Mr. Amlie's biography in the Congressional Directory describes him as "active in the movement for new political alignment," and also lists him as having been elected in 1935 to the chairmanship of the American Commonwealth Federation, "a movement to co-ordinate the liberal groups of the nation." He is a lawyer, born April 17, 1897, in Griggs County, N. Dak., and

educated at the University of North Dakota, the University of Minnesota and the University of Wisconsin Law School from which latter he was graduated in 1923 with an LL.B. degree. He has practiced law in Beloit, Wis., and Elkhorn since 1924; and is a past president of the Walworth County Bar Association. He was elected to the Seventy-Second Congress at a special election held on October 13, 1931, but defeated in the Republican primaries the following year. To the Seventy-Fourth and Seventy-Fifth Congresses he was elected as a Progressive, but, as stated above, was defeated last year for the Progressive senatorial nomination.

Mr. Amlie is expected to encounter some opposition in the Senate when his appointment comes up for confirmation. Among those calling for hearings before the Senate committee on interstate commerce have been Senator Burke, Democrat of Nebraska, and Senator Austin, Republican of Vermont. "The railroad problem," said Senator Burke, "is too serious at this time to permit placing anyone on the Interstate Commerce Commission but the most qualified, best equipped and clear-thinking individual that can be obtained. I think Mr. Amlie lacks those qualifications." Senator Wiley, Wisconsin Republican who now holds the seat for which Mr. Amlie unsuccessfully sought the Progressive nomination, was quoted as saying that he did not view the appointment as "exactly an effort for business appeasement." Without "attempting to pass on his qualifications at this time," Mr. Wiley added that Mr. Amlie "has been consistently leftist, certainly more so than the LaFollettes." Meanwhile, however, Representative Marcantonio (American Labor Party) of New York, called the appointment "marvelous," while Representative Coffee, Democrat of Washington, thinks it is "swell."

Under the law Commissioner Meyer, who



Harris & Ewing

Balthasar H. Meyer

has served longer than any other commissioner in I. C. C. history, will continue to serve until his successor qualifies. After that the 72-year-old "dean" of the commission plans to go into consultation and

mediation work in Washington. As pointed out in the *Railway Age* of December 24, 1938, the term of Commissioner William E. Lee also expired at the close of last year, while the inaction of the President has left Commissioner McManamy on the commission since the expiration of his term on December 31, 1937.

Balthasar Henry Meyer was born in 1866 in Mequon, Wis. He taught in Wisconsin schools and attended the University of Wisconsin before taking graduate work in economics, history and transportation at the University of Berlin, Germany. From 1895 until 1910 he held various positions on the University of Wisconsin's faculty. Meanwhile he was also appointed in 1905 to the Railroad Commission of Wisconsin and served as a member of the Railroad Securities Commission from 1910 to 1912. As stated above he became a member of the I. C. C. in January, 1911. The latest edition of "Who's Who in Railroading" also states that Commissioner Meyer "has done special work for the Committee of Fifty, Industrial Commission, Interstate Commerce Commission, Bureau of the Census." He was director of the Carnegie Institute's division of transportation, and the author of "Railways Legislation in the United States" (MacMillan, 1903); and of various articles and monographs on transportation and other economic subjects.

T. & T. Section to Meet April 18-20

The Telegraph & Telephone Section, Association of American Railroads, will hold its 1939 annual session at the Hotel Jefferson, St. Louis, Mo., on April 18, 19 and 20.

New Japanese Railway Representative at New York

The Japanese Government Railways has announced the appointment of Yasumichi Tasaka as resident representative of the New York office, succeeding M. Yagami, who is returning to Tokyo, Japan.

No Employee Deaths on the D. L. & W. in 1938

Employees of the transportation department of the Delaware, Lackawanna & Western engaged in train and yard services during 1938 without the loss of a single life while on duty. During this time they operated 5,056,500 passenger-train-miles and 3,738,000 freight-train-miles.

Lehigh Valley to Move General Offices

Lehigh Valley stockholders, at an annual meeting held in Philadelphia, Pa., on January 17, adopted a resolution approving removal of the Pennsylvania general offices of the road from Philadelphia to Bethlehem, Pa. Meetings of the directors will continue to be held in Philadelphia.

Rutland Seeks Services of National Mediation Board

The Rutland and all labor organizations concerned have invoked the services of the National Mediation Board with respect to the reduction of wages on the road on a sliding scale averaging 17 per cent which

was to have been effective January 12, as was reported in the *Railway Age* of January 14, page 121.

Bureau of Internal Revenue Ruling

The Bureau of Internal Revenue has issued a ruling (C. T. 14) holding that amounts deducted from the remuneration of employees of carriers to pay for switchmen's lanterns and hand tools purchased by such employees and used in performing their services for the company do not constitute "compensation" within the meaning of Section 1 (e) of the Carriers Taxing Act of 1937.

"Coronation Scot" Starts Sea Voyage

The "Coronation Scot" of the London, Midland & Scottish (Great Britain), which is to tour the United States in connection with its exhibition at the New York World's Fair, left Southampton, England, on January 23 on the steamship "Belpamela," and is expected to land in the United States some 20 days thereafter. The London, Midland & Scottish crew who are to operate the train are due to arrive in New York on February 3.

Passenger Agents Elect

The General Eastern Passenger Agents Association, New York, have elected the following officers: President, H. M. Fletcher, assistant general passenger agent, Northern Pacific; Vice-President, H. A. Lawrence, general passenger agent, Union Pacific; Treasurer (re-elected), J. L. Homer, general passenger agent, Delaware, Lackawanna & Western; Secretary (re-elected), C. B. Perkins, secretary, Norfolk & Western; Assistant Secretary, D. I. Lister, general eastern passenger agent, Missouri Pacific.

Traffic Men Report On Hastings' Plan

The committee appointed by the carriers' traffic officers to study and make a report on the feasibility of the Hastings plan for the postalization of freight and passenger rates reported back to the traffic officers at a meeting held in Washington, D. C., on January 24. It is understood that the meeting discussed the report in detail, but it was not made public. The report will be referred to a meeting of the Traffic Executives Association to be held on February 3.

Governor and Mayor Start Morning Hiawathas

Governor Harold E. Stassen of Minnesota, and Mayor Edward J. Kelly of Chicago dedicated the morning Hiawathas which the Chicago, Milwaukee, St. Paul & Pacific placed in service on January 21. Governor Stassen gave the "high-ball" that started the morning Hiawatha from Minneapolis, Minn., then swung aboard and collected tickets just as he did while attending law school in 1928 and 1929 when he worked as a sleeping car conductor for the railroad during summer vacations and on week-ends. The morning Hiawatha southbound leaves Minneapolis

at 7:50 a. m. and St. Paul at 8:25 a. m., and arrives at Chicago at 2:55 p. m. in time for connections with fast trains for the east and south. The morning Hiawatha northbound leaves Chicago at 10 a. m. and arrives in St. Paul at 5:50 p. m. and Minneapolis at 6:30 p. m.

R. C. C. Distribution

The Railroad Credit Corporation will make a liquidating distribution of one-half of one per cent on January 31, amounting to \$367,444, according to E. G. Buckland, president. Of this amount \$312,566 will be paid in cash and \$54,878 will be credited on carriers' indebtedness to the Corporation.

This will bring the total amount distributed to \$57,338,885 or 78 per cent of the fund amounting to \$73,511,390 originally contributed by the carriers participating in the Marshalling and Distributing Plan, 1931. Of this total \$29,966,761 will have been returned in cash and \$27,372,124 in credits.

Finds Monon Subsidiary Comes Under Retirement Act

The Railroad Retirement Board has made public an opinion by its general counsel holding that the Monon Transportation Company, subsidiary of the Chicago, Indianapolis & Louisville, is controlled by a carrier employer and is engaged in performing a service in connection with the transportation of passengers by railroad, and recommending that the Board rule that it is an employer within the meaning of the Railroad Retirement Act of 1937, and that the service rendered to it since May 19, 1930, is creditable by employees for annuities.

Culkin Urges St. Lawrence Seaway for "National Defense"

Representative Culkin, Republican of New York, advanced a "national defense" argument for the St. Lawrence seaway in an "extension of remarks" which appeared in the January 19 issue of the Congressional Record. In the course of the essay punctuated with such subheads as "Democracy in Peril" and "The Lesson of the World War" Mr. Culkin recalled that "Presidents Harding, Coolidge, Hoover and Roosevelt, looking at the St. Lawrence seaway from the national viewpoint, have been wholeheartedly for this development."

"Not more than a month ago," he added, "former President Hoover in a speech at a civic reception in Toronto said that the St. Lawrence seaway was close to his heart." Mr. Culkin went on to outline President Roosevelt's favorable views and to express hope that the United States and Canada would get together on the project "in the interests of a greater America."

Germans Build 8,000-Hp. Electric Locomotive

An experimental electric locomotive, rated 8,000 hp. and designed for operation at 112 m.p.h., was recently delivered to the German State Railway by the locomotive division of the A. E. G. located in Hennigsdorf, Germany, near Berlin. It is expected that further improvements will per-

mit speeds up to 140 m.p.h. When hauling a so-called "FD" express train of 8 light-weight passenger cars weighing 360 tons the locomotive can attain a speed of 112 m.p.h. within 4½ minutes, or a distance of 5½ miles. The locomotive is designed for operating the 360-ton train on grades without a helper and braking specifications require that the train be brought to a stop from 112 m.p.h. in a distance of 2,950 ft.

"Red Cap" Case is Reopened

Division 3 of the Interstate Commerce Commission has reopened the "red cap" case to permit oral argument on the question of whether or not red caps employed by carriers in cities of less than 100,000 population should be included within the term "employee" under the Railway Labor Act. The commission had previously decided that in cities of 100,000 population or more they should be so considered. The order of the commission states that at the hearing, to be held before Examiner Steer in Washington on February 23, the carriers will be expected to show cause, if any, why the report and order of the commission entered on September 29 should not be made applicable to all red caps in cities of 100,000 or less.

Morgenthau Releases Carriers' Tax Figures

Secretary of the Treasury Morgenthau has made public the second in the series of tabulations from the "Statistics of Income for 1936, Part 2, Compiled from Corporation Income and Excess Profits Tax Returns and Personal Holding Company Returns," prepared under the direction of Commissioner of Internal Revenue Guy T. Helvering.

Of the 539 steam railroads reporting, 225 made a return showing a net income of \$203,168,000 while 309 roads reported a net deficit of \$193,211,000. The 225 reporting a net income paid a normal tax of \$23,727,000, a surtax on undistributed profits of \$1,913,000, and an excess profits tax of \$86,000.

St. Louis-San Francisco Inaugurates Dixie Flash

Overnight freight service between Memphis, Tenn. and points in the southeast was inaugurated by the St. Louis-San Francisco on January 23, when the Dixie Flash was placed in service. With a departure from Memphis at 8:00 p. m. the overnight schedule makes possible the shipment of Memphis goods after the completion of a full business day, while at the same time perishables from Texas and California arriving in Memphis on late afternoon trains can be forwarded at a saving in time of 24 hours. The service gives 5:00 a. m. delivery in Birmingham and through connections provide delivery in Jacksonville, Fla. at approximately 2:30 a. m. the second morning.

Motor Carrier Safety Regulations

The Interstate Commerce Commission has reopened the Ex Parte No. MC-4 case dealing with the qualifications of employees and safety of operation and equipment of common and contract motor car-

riers, setting further hearings before Commissioner Lee in Washington, D. C., on February 16. Evidence taken at the further hearing will bear on proposed revisions and additions in the regulations established by the commission's order of December 23, 1936, particularly changes proposed by the Bureau of Motor Carriers.

A copy of the latter is attached to the order. The suggested changes cover all seven parts of the safety regulations, except those relating to hours of service of drivers and transportation of explosives and other dangerous articles.

F. K. Vial Awarded First Prize in Instrumentation Contest

F. K. Vial, vice-president in charge of research of the Association of Manufacturers of Chilled Car Wheels, was awarded the first prize of \$200 in the first Instrumentation Contest sponsored by the Industrial Instrument Section of the Scientific Apparatus Makers of America, Chicago. The contest, conducted by Richard Rimbach, publisher of Instruments, was open to engineers or operating men not employed by an instrument manufacturer, and essays were to describe "an unusual application of a standard instrument or control device, telling briefly what conditions or need impelled the application." "Instrument or control device" was defined as "any device used for measurement and control, or any accessory used with a device for measurement and control."

Mr. Vial's paper was on the Automatic CO₂ Compensator for Cupola Control, which is a pioneer application of automatic combustion control to the cupola.

N. H. Trustees Seek Stay of Ruling on Service Curtailment

The trustees of the New York, New Haven & Hartford have applied for a stay of a ruling of the U. S. circuit court at New York reversing an order issued on July 9 by Judge C. C. Hincks of the U. S. district court at New Haven, Conn., directing them to effect economies in operation on the leased Old Colony road through the abandonment of 88 stations in Massachusetts and entire cessation of passenger service on Cape Cod lines east of Yarmouth, Mass., and Hyannis. The decision, in effect, confronts the New Haven with the choice of either resuming operation of the trains and stations involved, discontinued on July 17, or of appealing to the U. S. Supreme Court. Trustees requested the stay to permit the road to file a writ of certiorari in the supreme court of the circuit court decision.

The Massachusetts Department of Public Utilities has set February 1 for resumption of hearings on the abandonment move.

C. F. Allen Elected to Honorary Membership in A. S. C. E.

During the 86th annual meeting of the American Society of Civil Engineers, which was held at New York on January 18 to 21, inclusive, a number of honorary memberships in the society were conferred on prominent engineers, among whom was

C. Frank Allen, professor emeritus, Massachusetts Institute of Technology and author of the well-known handbook, "Railroad Curves and Earthwork." Another feature of the meeting was the presentation, in absentia, of the Hoover medal to John F. Stevens in recognition of his achievements in connection with the building of the Panama canal and in his dealings with the Inter-Allied Forces in Siberia during the World war. In the absence of Mr. Stevens, who resides at Southern Pines, N. C., the award was received in his behalf by his son, Donald F. Stevens of Baltimore, Md. The citation in connection with the award was read by Ralph Budd, president, Chicago, Burlington & Quincy. A brief biographical sketch of Mr. Stevens was presented in the *Railway Age* of December 24, 1938.

Motor Carrier Cases

Meeting one of the conditions under which it was authorized to acquire control of Peoples Freight Line, Inc., the Pacific Motor Trucking Company, affiliate of the Southern Pacific, has now secured the approval of the Interstate Commerce Commission's Division 5 of a plan whereby People's will be merged into Pacific. Since this phase of the case was decided without hearing the commission has deferred entry of the order for 20 days in which interested parties may request a hearing or make other representations.

Joint Board No. 77, composed of Mark Marshall of Texas, has recommended in a proposed report that the Interstate Commerce Commission grant a common-carrier trucking certificate to the Texas & Pacific Motor Transport Company, affiliate of the Texas & Pacific, for operations between Big Spring, Tex., and Pecos. The Board would, however, follow recent I. C. C. decisions and impose conditions as follows:

- (1) The service to be performed by applicant shall be limited to service, which is auxiliary to, or supplemental of, rail service of the Railway;
- (2) Applicant shall not serve, or interchange traffic at, any point not a station on a rail line of the Railway;
- (3) Shipments transported by applicant shall be limited to those which it received from or delivers to the Railway under a through bill of lading covering, in addition to movement by applicant, a prior or subsequent movement by rail.
- (4) All contractual arrangements between applicant and the Railway shall be reported to us and shall be subject to revision, if and as we find it to be necessary in order that such arrangements shall be fair and equitable to the parties.
- (5) Such further specific conditions as we, in the future, may find it necessary to impose in order to restrict applicant's operation to service, which is auxiliary to, or supplemental of, rail service.

Railroads in Nebraska Need Not Remit Livestock Charges

Switching charges which were effective from 1927 to 1932 under a state commission order later vacated as discriminatory need not be remitted to shippers of livestock, as the result of a Nebraska supreme court ruling in a test case against the Union Pacific and other railroads appealed, by the Farmers Union Livestock Commission and others, from the Douglas County district court. The Livestock Commission contended that the railroads overcharged shippers 47 cents per car for switching service from main lines over the South Omaha stockyards on rails owned by the

stockyards. The court ruled that Nebraska's reparation statutes do not authorize the railway commission to condemn retroactively as unlawful a rate or charge previously established as lawful by it and subject a carrier which has conformed thereto to the payment of reparations measured by what the railway commission now holds it should have decided in the earlier proceedings to be a reasonable and lawful rate. A decision against the railroads would have opened the way for other livestock shippers to collect an aggregate of approximately \$175,000 for overcharges.

October, 1938, Accident Statistics

The Interstate Commerce Commission's completed statistics of steam railway accidents for October, 1938, now in preparation for the printer, will show:

Item	Month of 10 months ended			
	October 1938	1937	with October 1938	1937
Number of train accidents	532	743	4,697	7,208
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	220	240	2,014	2,295
Injured	191	226	2,150	2,324
Passengers on trains:				
(a) In train accidents:				
Killed	52	..
Injured	18	26	378	388
(b) In train-service accidents:				
Killed	2	13	12
Injured	133	160	1,521	1,646
Travelers not on trains:				
Killed	2	1	8	11
Injured	55	56	605	631
Employees on duty:				
Killed	41	57	399	564
Injured	1,418	1,953	13,219	20,414
All other nontrespassers:				
Killed	163	237	1,266	1,698
Injured	521	817	4,425	5,856
Total—All classes of Persons:				
Killed	426	537	3,752	4,580
Injured	2,336	3,238	22,298	31,259
* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than \$150 to railway property.				
** Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:				
Number of accidents ..	329	491	2,669	3,585
Persons:				
Killed	150	214	1,159	1,519
Injured	375	570	3,081	4,082

San Francisco-Oakland Bay Bridge Railway in Service

Commuters between San Francisco, Cal., and the East Bay cities of Oakland, Berkeley and Alameda, who for many years have used the ferry boats operated on the four-mile trip on the bay between Oakland and San Francisco, have used these ferries for the last time. Starting January 15, the multiple-unit, electrically-propelled cars of the three interurban systems which serve the East Bay cities are being operated over the double-track railway on the lower deck of the San Francisco-Oakland bay bridge and run directly into a new terminal in San Francisco. This operation saves approximately 30 min. time daily for each commuter.

The installation includes two interlockings, one at San Francisco and the other at Oakland, which are of the recently-developed route-control type, and on the bridge a system of cab signaling and train

control, without wayside signals, which permits the operation of following trains on a 63.5-sec. headway at a maximum speed of 35 m.p.h. Trains are scheduled on a 75-sec. headway, and in a 20-min. period during the morning rush 17,000 people are handled into the San Francisco terminal. The roads involved in this operation are the Key System, the Interurban Electric Railway (a subsidiary of the Southern Pacific), and the Sacramento Northern.

House Interstate Commerce Committee Organized

The Congressional Record for January 18 carries the list of assignments of Representatives to the various standing committees of the House, including the committee on interstate and foreign commerce. The new committee, which has two less members this session than last, the number having been reduced from 27 to 25, includes the following Democrats: Clarence F. Lea, chairman, California; Robert Crosser, Ohio; Alfred L. Bulwinkle, North Carolina; Virgil Chapman, Kentucky; William P. Cole, Jr., Maryland; Edward A. Kelly, Illinois; John A. Martin, Colorado; Herron Pearson, Tennessee; Lyle H. Boren, Oklahoma; Martin J. Kennedy, New York; Elmer J. Ryan, Minnesota; Charles L. South, Texas; James P. McGranery, Pennsylvania; Donald L. O'Toole, New York; and Luther Patrick, Alabama.

The following Republicans constitute the minority membership of the committee: Carl E. Mapes, Michigan; Charles A. Wolverton, New Jersey; James Wolfenden, Pennsylvania; Pehr G. Holmes, Massachusetts; B. Carroll Reece, Tennessee; James W. Wadsworth, New York; Charles A. Halleck, Indiana; Oscar Youngdahl, Minnesota; Carl Hinshaw, California; and Clarence J. Brown, Ohio.

L. V. to Inaugurate "Asa Packer" February 1

The Lehigh Valley will place its new train, the Asa Packer, into regular service between Newark, N. J., and Mauch Chunk, Pa., on February 1. The previous day, January 31, a special preview run will be made between Newark and Mauch Chunk, with a stop at Bethlehem, Pa., where the train will be christened in the traditional "champagne-busting" ceremony.

Named after the builder and early president of the Lehigh Valley, Asa Packer, the train is made up of reconditioned equipment painted in orange and black with aluminum lettering. The steam locomotive is being "cleanlined" and redecorated with a steel skirting and painted in conformity with the cars. The coaches have a buff and grey interior color scheme and seats are provided with linen seat covers. The club car to be carried includes a lounge, cocktail nook and dining room, where table d'hôte luncheons may be had for as low as 45 cents.

Running as trains Nos. 25 and 26, with a round trip daily except Sundays and holidays, the Asa Packer will leave Newark at 11:23 a. m., and arrive at Mauch Chunk at 2:46 p. m. Returning it leaves Mauch Chunk at 2:50 p. m., and arrives at New-

ark at 5:37 p. m. Direct connections are afforded by the Pennsylvania between Newark and Pennsylvania station, New York.

Freight Car Loading

Revenue freight carloading for the week ended January 21 totaled 590,359 cars, the Association of American Railroads announced on January 26. This was an increase of 3,482 cars or 0.6 per cent over the previous week, 20,126 cars or 3.5 per cent above the corresponding week of 1938 but 74,987 cars or 11.3 per cent below the comparable 1937 week.

The total for the previous week ended January 14 was 586,877, and the summary for that week, as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings			
For Week Ended		Saturday, January 14	
Districts	1939	1938	1937
Eastern	133,285	122,114	154,254
Allegheny	111,486	102,664	146,069
Pocahontas	41,852	40,160	52,143
Southern	91,459	92,755	105,290
Northwestern	70,289	72,668	80,348
Central Western	94,405	100,387	105,122
Southwestern	44,101	49,992	52,809
Total Western Districts	208,795	223,047	238,279
Total All Roads	586,877	580,740	696,035
Commodities			
Grain and Grain Products	34,056	42,393	31,482
Live Stock	13,152	15,219	15,768
Coal	123,664	131,757	161,178
Coke	6,972	6,866	11,821
Forest Products	26,416	25,878	31,769
Ore	7,849	7,772	11,143
Merchandise L.C.L.	145,469	141,252	160,929
Miscellaneous	229,299	209,603	271,945
January 14	586,877	580,740	696,035
January 7	530,849	552,568	700,046
December 31		499,895	454,906
December 24		574,462	457,821
December 17		606,314	600,283
Cumulative Total, 2 Weeks	1,117,726	1,133,308	1,396,081

In Canada.—Car loadings for the week ended January 14 totaled 40,402 cars as compared with 45,503 cars for the same week last year, according to the report of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
January 14, 1939	40,402	23,312
January 7, 1939	35,664	21,076
December 31, 1938	31,046	16,904
January 15, 1938	45,503	22,541
Cumulative Totals for Canada:		
January 14, 1939	76,066	44,388
January 15, 1938	89,415	42,653
January 16, 1937	92,294	53,586

N. Y. Traffic Club Holds New York World's Fair Luncheon

The Traffic Club of New York held a luncheon on January 24 at which more than 300 traffic representatives and shippers heard brief talks concerning coming attractions of the New York World's Fair, with emphasis upon the railroad exhibits. Paul Penhume, in charge of the extensive model railroad to be exhibited by the Eastern carriers, entitled "Railroads at Work" described the project briefly, hitting the high-spots of the cycle of railroad operations which will be illustrated by the model layout ten times daily, "every-hour-on-the-hour." Vincent Murphy, assistant director of employment and welfare of the New

York World's Fair, and former New York state assemblyman, outlined the program of the Fair with special reference to its international character. Edward Hungerford, director of the pageant "Railroads on Parade," another feature to be presented by the Eastern carriers, discoursed briefly on the show pointing out that it will be presented four times daily and will consume about an hour and 30 minutes. He especially emphasized the fact that at this time the railroads are working together to present one outstanding exhibit rather than scores of single exhibits which tend to combat each other and suffer by comparison with the quality of exhibits put on by competing industries. Extended descriptions of the railroad exhibit at the World's Fair given by Mr. Penhume and Mr. Hungerford at the New York Railroad Club were summarized in the *Railway Age* of November 26, page 766.

N. Y. Commission Finds Bus Superior to Train Service

The New York Public Service Commission has authorized the Edwards Motor Transit Company, Inc., to operate a 32-mile motor bus line between Buffalo, N. Y., and Springville through Erie county, closely paralleling that portion of the Baltimore & Ohio's line (formerly B. R. & P.) between Buffalo and Pittsburgh, Pa., being of the opinion that bus service "is more intimate and flexible and better adapted to serve the 'ribbon development' now extending out from our principal cities and larger villages to rural areas, as well as to serve persons in rural communities who find it necessary to shop or attend to other business, or to seek professional services available in cities, or who desire to avail themselves of facilities for entertainment, than rail service." Opposition to the granting of the petition for the proposed operation, other than that put forth by the Baltimore & Ohio and an adjacent motor bus operator, came from a group of taxpayers and citizens of Ellicottville, N. Y., who favored the railroad service as being sufficient for their needs and because of the large amount of taxes paid by the railroads.

The bus company had originally asked authority to operate an 81-mile route from Buffalo through Springville and Great Valley to the Pennsylvania state line, but the commission authorized only the route outlined as far as Springville. The railroad now operates six trains over the route daily, four of which make local stops. The commission's opinion pointed out that the railroad had presented no record of cost or losses at the hearings "except that \$110,000 of taxes were paid."

Florida Canal Just Another "Rivers and Harbors" Project

Senator Pepper, Democrat of Florida, asked in the Senate last week that the proposed Florida Ship Canal receive "the usual and the regular and the proper consideration" which any "other rivers and harbors project" would receive from the army engineers and the Congress, but he did not answer a question from Senator Burke, Democrat of Nebraska asking whether Senator Pepper raised any ob-

jection to the propriety of requesting at this time that the various departments of government which heretofore have declared the project neither "feasible nor proper" should bring their reports down to date. As noted in the *Railway Age* of January 24, President Roosevelt has suggested a revival of the Florida canal.

The above-mentioned Senate discussion came as a result of two resolutions introduced by Senator Vandenberg, Republican of Michigan—one calling upon the Secretary of Interior to report the present opinion of the United States Geological Survey regarding the probable effect of the construction of the canal upon ground-water levels and ground-water supplies, and the other requesting the Department of Commerce to survey previous findings made in a 1934 report which found that the projected canal was not justified on the basis of benefits to shipping.

After Mr. Vandenberg had offered these resolutions, Mr. Pepper said he would appreciate the Michigan Senator's letting the Florida Senators represent the latter state. Mr. Vandenberg recognized "the great capacity of Florida's representation" but added that if the canal were built Michigan would have to pay at least \$10,000,000 of the \$200,000,000 estimated cost. After further by-play along that line, Senator Burke put his question, which he insisted had not been answered by Senator Pepper when Minority Leader McNary shut off discussion with a call for "the regular order."

Club Meetings

The Southern and Southwestern Railway Club will hold its next meeting on March 16 at the Ansley hotel, Atlanta, Ga., at 10 a. m. A paper entitled "Practical Shop Operation" will be presented by W. L. Rice, superintendent of shops, Reading, Pa.

The next meeting of the New England Railroad Club, to be held on February 14 at the Hotel Touraine, Boston, Mass., has been designated "Canadian Night." "Railway Equipment Maintenance — Modern Practice Versus Obsolescence Waste" will be presented by J. Roberts, chief of motive power & car equipment of the Canadian National. The meeting will start with a dinner at 6:30 p. m.

The Indianapolis Car Inspection Association will hold its next meeting on February 6 at 7:00 p. m. at the Severin hotel, Indianapolis, Ind.

The Toronto Railway Club will hold its next meeting on February 27 at the Royal York hotel, Toronto, Ont., at 7:45 p. m. The meeting has been designated as "Maintenance of Way Night" and A. O. Wolff, assistant district engineer of the Canadian Pacific, and W. B. Wheelwright, engineer maintenance of way of the Canadian National, will be the speakers.

At the next meeting of the Car Foremen's Association of Chicago, to be held on February 13 at 8:00 p. m. at the La Salle hotel, Chicago, Ill., discussion of the new A. A. R. Rules of Interchange and Proposed Changes to be made in these rules for 1940 will be continued.

The Car Foremen's Association of Omaha, Council Bluffs and South Omaha

Interchange will hold its next meeting on February 9 at 2 p. m. at the Union Pacific headquarters in Council Bluffs, Iowa. "Rule 32" will be discussed by F. M. Rezner.

The Traffic and Transportation Association of Pittsburgh will hold its 25th annual dinner on February 16 at the William Penn hotel, Pittsburgh, Pa. John B. Kennedy, associate editor of "Collier's Weekly," will be the principal speaker.

The next regular meeting of the Traffic Club of Newark (N. J.) will be held on February 6 in the Chamber of Commerce auditorium. D. T. Lawrence, chairman, Traffic Executives Association—Eastern territory, will be the principal speaker.

The Committee on Railroad Support, at its meeting on February 3, Room 1013, 466 Lexington Avenue, New York, will receive and discuss a report from a sub-committee appointed to consider the co-operation of rail employees in urging favorable legislative action both independently and through concerted action.

The annual dinner and entertainment of the Eastern Car Foremen's Association will be held on Thursday, February 9, at the Hotel Commodore, New York, at 7 p. m.

New York City Commission to Study Truck Situation

Conclusions based on statistics covering the extent to which traffic has been shifting from the railroads entering New York to over-the-road truckers may be made public some time this year as a by-product of studies to be made by a three-man fact-finding commission appointed recently by Mayor F. H. LaGuardia of New York City to investigate the motor trucking situation in the city.

The commission, made up of H. S. Robertson, manager of Rockefeller Center; S. A. Lewisohn, banker; and R. V. Ingersoll, president of the Borough of Brooklyn, has as its specific job the investigation of all factors bearing upon the volume of truck traffic in New York, upon costs, wages and diversion of trade to other cities. However, in order to determine the causes of a marked reduction in local drayage in the city, the commission has been instructed to determine the extent to which traffic has been diverted from railroad and steamship lines to over-the-road truck operators, which process obviously reduces the need for local trucking. Other studies to be made include the effect of terminal costs in the city on traffic volume and diversion to other ports and shipping centers; union practices with respect to trucking and handling of freight; terminal practices at competitive ports; wage and hour differentials; and comparisons of labor contracts and basic wages of truckmen with those applicable in other large cities. Expenses of the commission are to be paid by over-the-road and local trucking companies and labor organizations of truck employees.

Snyder Defends Super-Highway Bill

During a speech in the House of Representatives on January 18, in which he was discussing his super-highway bill, Repre-

sentative Snyder, Democrat of Pennsylvania, was questioned at length by several members of the House regarding certain features of the proposed super-highway. One of his interrogators was Representative O'Connor, Democrat of Montana, who asked Mr. Snyder whether or not the railroads would be driven out of business if the super-highway were used for heavy freight trucking.

Continuing his question Mr. O'Connor said that "We are contemplating spending \$300,000,000 or \$400,000,000 to rehabilitate the railroads. Would the construction of competitive highways at government expense make sense with this program?"

Mr. Snyder replied that the railroads have said, by their action, that they are no longer interested in the short haul business. He went on to say that this had been their attitude for the past 20 years.

"I was born and raised alongside the B. & O. Railroad", he continued, "and I have always been strong for the railroads. In fact, what I wanted to become when I was a youth was a railroad engineer. In my section the railroads themselves have done away with practically every branch within 100 miles of where I was born and raised. They used to have branches running up for a few miles here and there, and there are very few, if any, left. They used to stop at the little town of Casselman and pick up freight every day, and there were five or six passenger trains. There is no station there now at all and none at the next place below, and at least five of these little stations in a row have all been done away with, and if you want to get a commodity now, you have to drive nine miles one way or 12 miles the other. So they themselves have said by their actions that they do not want the short-haul stuff any more, that they want the long-haul commodities and let the short hauls go to some other form of transportation."

Calls Upon "Undernourished" Investors to Unite for Action

J. Newcomb Blackman, vice-president and New York representative of the American Federation of Investors, Inc., delivered an address before his "undernourished fellow stockholders" at a meeting of the Irving Trust Company in New York on January 18, with the express purpose to "turn the light on some vital facts that should be known by 64,000,000 life insurance policy-holders, 45,000,000 savings and other bank depositors and 15,000,000 stockholders of our industrial enterprises."

The speaker first recalled an address entitled "The Forgotten Investor" delivered at the annual stockholders' meeting of the Baltimore & Ohio on November 21 in which he stated "What has it cost 45,000,000 savings bank depositors to have their interest reduced steadily from 4.5 per cent to 2 per cent. Should they demand, by organized effort, that their income be maintained at the 1929 rate, as our railroad employees have demanded with such success? Should they strike and withdraw their money from the banks and put it in a secret hiding place?" He then referred to personal research which computed that depositors in 12,435 classified savings banks

lost \$2,781,613,474 from June 30, 1929, to June 30, 1938, in reduced interest; that some 64,000,000 insurance policy-holders incurred a loss of \$1,761,106,052 from reduced dividends from the end of 1929 to the end of 1938.

Coming to the part the railroads play in such investors' losses, Mr. Blackman again quoted from his B. & O. address to the effect that more than half of the interest paid by the carriers goes to insurance companies, mutual savings banks, educational and charitable institutions, and the like, and that the real losers from decreased railroad earnings are the millions of persons thus represented. He then quoted a statement made by President Willard of the B. & O. in reply to his address at the November stockholders' meeting which read, in part: "I think we should not blame our employees for having organized, secured the right of collective bargaining and, because of their political strength, gotten concessions that we think they were not entitled to . . . My experience is that members in Congress will listen to the voters . . . if they hear more from organ-

ized labor than they do from the investors, I think the investors are more at fault than labor if Congress at times may do things that seem to unjustly advance its interests.

"It is not necessary that every investor should present his own case to Congress. The million or more railroad employees do not go there themselves, but they are so organized that their representatives can go there and say what the people back home are likely to do if Congress does not give proper consideration to their interests . . . It would be much better if the stockholders, and other security holders of the B. & O. and of other railroads, could also go and present their case in person. I regret to say that very rarely has this been done in the past."

Swaine Predicts Long Legal Battle in W. P. Case

A prediction by R. T. Swaine, counsel for the institutional bondholders' committee, that if the A. C. James Company does not agree to the principles of the amended plan of reorganization for the Western Pacific introduced by Daniel Willard, Jr.,

general counsel for the Railroad Credit Corporation, the case will be involved in litigation for at least five years, was made on January 20 when the Interstate Commerce Commission heard oral argument in the reopened case. The commission has issued a final plan of reorganization for the company, but it has been objected to by all the parties to the proceeding.

F. C. Nicodemus, counsel for the debtor company, began his argument by pointing out to the commission that all the parties were opposed to the plan prescribed by the commission. The debtor, he said, objected to the "undercapitalization" of the new company, contending that there was enough value left in the company to provide some equity for the old holders of the common and preferred stock. The commission plan had wiped out both holders entirely. He said that the road had real earning power and urged the commission to consider the fact that an alternate route for the Southern Pacific route from Salt Lake City to San Francisco is necessary and that the Western Pacific provides such a route.

Mr. Swaine warned the commission that there will be long and costly litigation if the commission does not change its present plan. He said that the bondholders objected to the Reconstruction Finance Corporation getting full payment for its claim and the bondholders receiving only four-fifths of their claim.

Turning to the specific features of the commission plan, Mr. Swaine said that his clients wanted a clause in the first mortgage which would place a limit on the amount of bonds that could be issued under it. He also contended that the commission should fix an upset price at which the property could be sold at a foreclosure sale if the reorganization plan is not consummated. He closed his argument with a plea that the commission decide the broad general principles of the case and permit his clients to sit down at a round-table conference with representatives of the commission and work out the exact details of the plan. Only in this way, he said, could a satisfactory plan be accomplished.

Cassius M. Clay, railroad counsel for the RFC, told the commission that he hoped it would substitute the bondholders' plan for its own. He also observed that since he had last appeared before the commission in this case, the RFC's interest had changed insofar as now it holds not only collateral for the original \$3,800,000 loan to the company, but is also a creditor of the trustees to the extent of \$10,000,000, having recently loaned the trustees that amount to refund outstanding trustees' certificates.

Appearing as counsel for the Railroad Credit Corporation, Daniel Willard, Jr., asserted that he would be opposed to an upset sale for the reason that his corporation was not in a position to protect its interest should the court order such a sale.

More Transport Bills Received by Congress

As Congress gets more fully under way the number of transportation bills introduced has decreased measurably during the past week. Some super-highway bills continue to find their way into the congress-



Cartoon by Brown in the N. Y. Herald Tribune

"Turning the Tables"

sional mill. Representative Steagall, Democrat of Alabama, has introduced H. R. 1003, a bill setting up an authority which would be given power to construct a transcontinental system of highways. Mr. Steagall's bill goes into detail as to the method of construction, maintenance, and other subjects. All activities of this authority would be subject to the approval of the War Department.

Representative Randolph, Democrat of West Virginia, has introduced one bill, H. R. 2767, and two House Joint Resolutions, 115 and 116, the purposes of all three measures being to set up a Super-highways Commission to construct a series of super-highways throughout the length and breadth of the country. Senator Lundeen, Farmer-Laborite of Minnesota, has offered S. 814, an identical bill to that introduced in the House recently by Representative Snyder, Democrat of Pennsylvania. The bill would provide for the location, survey, and building of a system of three trans-continental and six north-south highways. Representative Collins, Democrat, of Mississippi, has introduced H. R. 3045, a bill to provide for the location, and construction of a through multiple national highway system. The bill would create a Highway Agency to carry out this task.

Representative Havenner, Democrat of California, has introduced H. R. 2966, a bill to amend the Railroad Retirement Act of 1937, so as to permit a railroad employee to credit the time served in the armed forces during the World War as time worked under the Act.

Representative Youndgahl, Republican of Minnesota, has introduced H. R. 2759, a bill identical with the Pettengill bill of last session, which provides for the repeal of the long-and-short-haul clause of the Interstate Commerce Act. This is the same as the bill already introduced this session by Representative Martin, Democrat of Colorado.

Senator Caraway has offered S. 346, a private bill, which would provide for the reimbursement of the St. Louis Southwestern for an expenditure in revetment work on the Arkansas River during the flood of 1927. The sum asked for is \$31,280.

Senator Logan, Democrat of Kentucky, has introduced S. 916, a bill to establish a United States Court of Appeals for Administration, to receive, decide, and expedite appeals from federal commissions, administrative authorities, and tribunals, in which the United States is a party or has an interest. The bill provides that decisions of the Interstate Commerce Commission, except as to orders for the payment of money, shall be subject to review by this court.

Following up his bill of last week, Representative Tinkham, Republican of Massachusetts, has introduced, by request, House Joint Resolution 112, which would create a commission to study and report on the feasibility of constructing a Mexican Canal.

Western-Southern Bloc Formed to Fight Rate Differentials

Members of Congress from the south and west met on January 20 in Washing-

ton and formed a bloc to force down territorial differentials in railroad freight rates. Sixty house members, representing 20 states agreed to back legislation which would provide national equality in freight rates.

The bloc elected Representative Ramspeck, Democrat of Georgia, chairman; Representative Terry, Democrat, of Arkansas, vice chairman; and Representative McLaughlin, Democrat of Nebraska, secretary. Representative Ramspeck and other southerners called on the western representatives for help, declaring that the northeast received preferential treatment at the expense of every other section of the country. The western representatives were told that their States suffered even more severe discrimination than that directed against the south.

The conference decided to request a hearing before the House interstate and foreign commerce committee, despite an assertion by Representative Rankin, Democrat of Mississippi, that this procedure would serve only to "bury" the program. Representative Rankin proposed a movement to block the Administration's general railroad legislation unless it included a provision guaranteeing sectional equality in freight rates. He later withdrew this resolution after several representatives expressed unwillingness to bind themselves at the outset to oppose any other legislation.

Ramspeck, Terry, McLaughlin and a 15-member executive committee were instructed to confer on terms of the freight reduction program and to report back to another meeting of the group on January 27.

Meanwhile, at a meeting held on January 20, in Washington, the Council of State Governments adopted a resolution which requested Congress to conduct a general investigation of all freight rates and to recommend "equitable" rates for the entire country.

The Appendix of the Congressional Record of January 18 carries an extension of remarks by Representative Pace, Democrat of Georgia, in which he inserted in the Record the recommendations of a meeting of southern citizens which was held in Atlanta, Ga., last week. Included in the list of recommendations was the following one concerning freight rates:

"The South has a vital interest in the promotion of economic opportunity throughout the United States and in the freest possible flow of commerce among all sections and regions of the country. The freight rate differentials imposed upon the south constitute a tariff against southern goods as discriminatory as the tariff against the goods of a foreign nation."

"Since it is the constitutional responsibility of the Congress to remove all arbitrary barriers and restraints which impede interstate commerce, we favor the passage at the session of the Congress of a bill to amend the Interstate Commerce Act for the purpose of equalizing rates by eliminating any undue or unreasonable preference or advantage to any region, territory, sub-region, or sub-territory which has the effect of hindering the development of other regions. This measure would benefit the consumers of the entire Nation and is absolutely essential to a balanced economy for the South."

Opposition to K. C. S-L. & A. Merger is Withdrawn

Two of the chief obstacles to the merger of the Kansas City Southern and the Louisiana & Arkansas were removed at a hearing before the Interstate Commerce Commission in Washington, D. C., on January 23 when organized railroad labor and the principal southwestern rail competitors of the two carriers withdrew their objections to the consolidation. Railroad labor's opposition to the merger, it was announced at the hearing, was withdrawn when the Kansas City Southern recently signed the so-called Washington agreement which provides for financial payments to rail workers who are displaced as a result of consolidations.

The objections of the southwestern carriers were withdrawn when a stipulation was entered into at the hearing to the effect that the new Kansas City Southern-L. & A. system as well as all other roads in the affected territory would maintain existing routes and joint rates unless ordered to do otherwise by the commission. The intervening roads included the Texas & Pacific, the Texas & New Orleans, the Missouri-Kansas-Texas, the Missouri-Kansas-Texas of Texas, the Midland Valley, the Chicago, Rock Island & Pacific, the Chicago, Rock Island & Gulf, the St. Louis Southwestern, the Southern Pacific, the Illinois Central, and the Yazoo & Mississippi Valley.

Harvey Couch, chairman of the board of the Kansas City Southern, spent all of the first day on the witness stand. He explained to the commission that he took no active part whatsoever in the negotiations which led to the proposed merger of the two roads. He said that the matter had been brought up at board meetings by certain board members, but that all negotiations were carried on without his active participation. His reason for not taking part in the negotiations, he explained, was that he was the majority stockholder in both corporations.

Most of Mr. Couch's testimony was devoted to explaining to the commission the reasons for his acquisition of the two properties and his desire to merge them. He went on to tell the commission that his general objectives were:

1. Development industrially of the southwest territory which the two roads serve;
2. Improvement of carrier service within the territory of the two companies;
3. Higher transportation efficiency of the two roads in order to better meet competitive conditions;
4. Greater economy in operations;
5. Restoration and maintenance of the two companies' competitive parity among railways which in part serve the southwest; and
6. Permanence of the two properties.

Mr. Couch also told the commission that the two properties, combined, would provide a short line and a direct route between the Missouri river and the Gulf of Mexico. He also contended that the consolidation would eliminate the delays and other disadvantages of the interchange between the two roads, will enable them to provide a better service, both freight and

passenger, and will provide for the traffic moving through the port of New Orleans, a through direct route to the central northwest.

A new note was introduced at the commission hearing when Mr. Couch presented to the members of Division 4 and those attending the hearing a moving picture with sound accompaniment showing the physical setting of the two roads and the variety of industries which they serve.

The picture, which takes about 50 minutes to show, was presented last week to newspaper men in the office of the Kansas City Southern at New York.

R. B. A. Urges Subsidy

At a press conference in the Hotel Commodore, New York, on Wednesday of this week, Harry A. Wheeler, president, and Dr. Lewis C. Sorrell, assistant to the president of the Railway Business Association, explained the recommendations of that organization for railroad legislation.

Recognizing the serious emergency which the railroads face, and in order to clarify thinking on railroad problems and assist Congress in taking constructive action for their immediate and long distance needs, the R. B. A. has published a series of three booklets. One of these, entitled, "Proposals for Railroad Rehabilitation in Relation to National Recovery and Defense", considers the various factors which are responsible for the crisis, and then states and explains the recommendations of the association for legislative action.

These emphasize the continuance of private ownership, with the necessity for the financial reorganization of the carriers in receivership-trusteeship and make recommendations as to consolidations, suggestions for rate making, and the necessity of a definite subsidy for a limited period. It is suggested that this so-called "national defense subsidy" be limited to a period of from three to five years and be based upon a definite proportion, say 25 per cent, of their expenditures for maintenance of way and structures (not equipment) during each year of the period beginning with 1939. It is estimated roughly that this subsidy might range between \$100,000,000 and \$200,000,000 a year.

It is said that such a subsidy would accomplish the following objectives:

- (1) It would contribute to national preparedness, defense and security. The present state of the railways jeopardizes the national defense. There is an imperative necessity for the government to assist the industry as part of the defense program, and a subsidy is the most effective step to that end.
- (2) It is justified by similar treatment of other types of carriers.
- (3) It would promote industrial recovery.
- (4) It would increase employment.
- (5) It would increase use of materials.
- (6) Such relief would extend to the weak roads. Efforts to increase railroad revenue were criticized on the ground that they would help the strong roads that needed it least and not help the weak and distressed railroads which need it most. The same criticism, it is claimed, will not hold against a plan for subsidies for maintenance of roadway and structures, because it

will be based on what they actually spend, on the additional employment they provide, and on their contributions to better business and to recovery as well as defense.

The pamphlet also includes data as to the amount of deferred maintenance of equipment and its inadequacy in the event of business recovery or emergency. It further carries brief summaries of the legislative programs sponsored by the Association of American Railroads, the President's Committee-of-Six, the Railway Business Association, the Transportation Conference of 1938, the Transportation Association of America, the Splawn-Eastman-Mahaffie Committee of the Interstate Commerce Commission, railway labor as presented by George Harrison, and the Lea Bill, which was recently introduced in the House.

The second pamphlet, prepared for the convenience of members of Congress and others interested, summarizes the various legislative proposals under different headings and also includes an abstract of the Lea Bill.

The third pamphlet is entitled, "The Present State of Railroad Credit in the United States in Relation to Railroad Rehabilitation." It divides the railroads into four groups from the credit standpoint and then considers what must be done to rehabilitate railroad credit. Obviously increased traffic is necessary, but even if business does increase this will not suffice to meet the needs of many of the carriers. Certain of them must undergo drastic financial reorganization. Even with the restoration of earnings and reorganization the railroads must practice strictest economy; one of the best means of so doing is a consolidation program which will realize substantial operating economies. In order to meet the present emergency, however, these betterments must be supplemented, for a limited time, by the above suggested national defense subsidy.

Transport Clinic Meets Third Time

(Continued from page 198)

roads; Relief from Burdens and Restrictions.

RAILROAD RATE PROVISIONS

The conference went on record against repeal of the present rate-making rule, rejecting a substitute provision similar to the one proposed by the President's committee-of-six. It was the sense of the conference that the present rate-making rule, while not perfect, should not be lightly cast aside.

Three specific changes, relating to rate making, were advocated, namely:

The Interstate Commerce Commission should have authority to prescribe minimum as well as maximum joint rail-water rates.

The Hoch-Smith Resolution should be repealed and Congressional rate-making should be avoided as unsound in principle and contrary to the public interest.

The existing provisions of law authorizing certain government officers to make complaints regarding transportation rates and to appear before the Interstate Commerce Commission in support thereof should be repealed.

FEDERAL FINANCIAL AID

Rather than urging additional govern-

ment loans to ease the financial plight of the railroads, the conference suggested four things that might be done to improve their financial situation and promote their rehabilitation. It was unanimously agreed that these recommendations should apply wherever practicable to all forms of transportation. They are:

Railroad emerging from bankruptcy or entering into consolidations should be authorized to make new declarations of value of their capital stock for tax purposes without awaiting completion of the usual three-year period.

Paper profits to railroads in connection with debt retirement should be made, for a limited period, an authorized deduction from income subject to federal income tax.

Net expenditures of railroads for debt deduction, additions and betterments should be made, for a limited period, an authorized deduction from income subject to federal income tax.

As an alternative to complete relief from undistributed profits tax, net expenditures of railroads for debt reduction, additions and betterments should be made an authorized deduction from income subject to that tax.

CONSOLIDATIONS, COORDINATIONS AND ABANDONMENTS

To give railroad managers greater leeway in effecting voluntary consolidations, the conference urged repeal of the present consolidation provisions. The rail carriers, it proposed should be permitted to bring about such voluntary consolidations and coordinations as will result in economies, assure adequate service and preserve reasonable competition, subject to approval of the commission.

It further recommended that—

Power of eminent domain should be given over small minority stock interests in consolidations approved by the Interstate Commerce Commission. Legislation should be adopted requiring more expeditious disposition of abandonment applications.

To facilitate co-ordinations and consolidations, dismissal and displacement allowances under the "Washington Agreement" between railroads and employees should be credited against payments due as federal income taxes.

FINANCIAL REORGANIZATION

To facilitate reorganizations, the conference suggested legislation to permit a carrier and its stockholders and creditors to secure approval by the commission of an agreed plan of reorganization which, when so approved, may be made promptly effective against small minority interests by a bankruptcy court, without the appointment of a trustee.

BURDENS AND RESTRICTIONS

Six definite proposals are put forward to give the railroads relief from certain burdens and restrictions. These proposals are:

The land-grant statutes should be repealed. Railroads should be relieved of the expense, in excess of net direct benefits to them, for elimination of railroad grade crossings and for reconstruction of railroad bridges in connection with navigation or flood-control projects.

Carriers as well as all other business should be relieved of the undistributed profits tax.

Congress should require the government to dispose of the federal barge lines to private parties. Restrictive measures such as train-length limit, excess-crew laws, six-hour days, etc., should be avoided.

The Railway Labor Act should be amended—
(a) To include public members in odd numbers on Adjustment Boards so as to insure disposition of each case in the first instance.

(b) To authorize federal court review of Adjustment Board decisions at the instance of the railroads as now allowed employees.

(c) To place a limit upon the time within which claims can be presented.

The conference took a definite position in opposition to any plan to "postalize" railroad rates.

Equipment and Supplies

Missouri Pacific to Spend \$8,560,864

The federal district court at St. Louis has authorized the trustee of the Missouri Pacific and subsidiaries to spend \$8,560,864 for betterments and improvements of which \$4,988,211 is chargeable to capital account. Of this amount the Missouri Pacific Railroad and subsidiaries will spend \$7,197,729 of which \$4,002,148 is chargeable to capital account, the money to be used for betterments and improvements of the track and roadbed, bridges, trestles and culverts, grade crossings, signals, interlocking plants, telegraph and telephone lines, fences and snow sheds, station houses, fuel stations and appurtenances, water stations and appurtenances, shop buildings, engine houses and appurtenances, shop and roadway machinery and tools, electric power plant distribution lines, assessments for public improvements, river protection, and miscellaneous structures for improvements to existing equipment, including locomotives, passenger and freight cars and miscellaneous equipment.

In another petition not yet approved, the trustee suggested that an additional \$4,623,000 be spent by the Missouri Pacific for two 900-hp. Diesel-electric locomotives for use on its Union-Lincoln lines, costing \$198,000; three 900-hp. and two 600-hp. Diesel-electric locomotives for use in the St. Louis terminal, costing \$381,000; two streamlined trains, \$360,000 for the locomotives and \$984,000 for the cars; and 1000 50-ton flat bottom gondola cars, costing \$2,700,000; and 200 50-ton box cars and 50 50-ton coal cars, costing \$860,000, for the Missouri & Illinois.

Of the eight and one-half million dollars, \$741,555 of which \$541,575 is chargeable to capital account, is for the New Orleans, Texas & Mexico and certain subsidiaries. This expenditure is for betterments and improvements in the track and road bed, bridges, trestles and culverts, grade crossings, signals, yard tracks, sidings and industrial track, telegraph and telephone lines, roadway and shop machinery and tools, right-of-way fences, station houses, office buildings and other facilities, water stations, assessments for public improvements and for improvements to existing equipment.

A total of \$487,720 of which \$361,500 is chargeable to capital account is for the International Great Northern. The money will be spent for betterments and improvements in the track and roadbed, bridges, trestles and culverts, grade crossings and crossing signs, roadway and shop machinery and tools, freight and passenger stations and office buildings, shop buildings and engine houses, assessments to public improvements and river protection and drainage, miscellaneous equipment and improvement to existing equipment.

A total of \$133,860 of which \$82,988 is

chargeable to capital account, will be spent on the Missouri & Illinois. This will be spent for betterments and improvements in the rails and other track material, bridges, trestles and culverts, grade crossings and crossing signals, additional yard track, sidings and industry track, freight and passenger stations, fuel and water stations and appurtenances, and shop buildings, engine houses and appurtenances.

Between 35,000 and 40,000 tons of rail will be purchased.

FREIGHT CARS

THE GREAT NORTHERN is inquiring for 25 tank cars of 16,000 gal. capacity.

THE DENVER & RIO GRANDE WESTERN is considering the purchase of 700 box cars.

THE MEXICAN GOVERNMENT RAILWAYS is inquiring for 10 flat cars and 10 gondola cars of 50 tons' capacity.

THE UNION PACIFIC is inquiring for 300 flat cars of 50 tons' capacity. This is in addition to its inquiry for 1,000 to 2,000 box cars, reported in the *Railway Age* of January 21, page 174.

PASSENGER CARS

THE CHICAGO, ROCK ISLAND & PACIFIC is considering the purchase of streamline trains for use between Chicago and Denver, Colo.

THE CHICAGO & NORTH WESTERN has ordered two light-weight streamline Diesel electric passenger trains for its "400," operating between Chicago and the Twin Cities, authority being granted by the United States District Court at Chicago on January 24. The two Diesel electric locomotives are being built by the Electro-Motive Corporation at a cost of \$720,000. Each of the two units will contain four 1,000-hp. engines. They are designed for operation without turn around so that they can be attached to the North Western Limited which leaves each terminal immediately after the arrival of the "400" and thereby make two trips daily. The 20 cars costing \$1,600,000, have been ordered from the Pullman Standard Car Manufacturing Company. The consists of each train include a taproom-lounge car, four coaches, one dining car, three parlor cars and one observation-club car. The exterior color scheme will be armour yellow with autumn brown trim. The capacity of each train will be 409 seats excluding accommodations in smoking rooms, but including 56 seats in coaches, 27 in each parlor car, 56 in the diner, 12 in the parlor-lounge-observation car and 36 in the taproom lounge.

IRON AND STEEL

THE SPOKANE, PORTLAND & SEATTLE has ordered 4,000 tons of rails from the Colorado Fuel & Iron Co.

THE UNION PACIFIC has placed orders for 100,000 tons of rails and fittings at a cost of approximately \$5,000,000. Included

in this tonnage are 32,657 tons of rails and 1,600 tons of joint bars placed with the Colorado Fuel and Iron Company, 32,657 tons of rails and 1,600 tons of joint bars placed with the Carnegie Illinois Steel Corporation, and 8,906 tons of rails and 430 tons of joint bars placed with the Inland Steel Company.

BOSTON & MAINE.—This road has ordered 600 tons of 112-lb. rail from the Bethlehem Steel Company.

THE SOUTHERN PACIFIC has ordered 40,000 tons of rail to include 131-lb. and 112-lb. sections. The order was divided among the Colorado Fuel & Iron Corp., the Columbia Steel Company and the Bethlehem Steel Company.

THE SOUTHERN has placed orders for 23,000 tons of rail with the Tennessee Coal, Iron & Railroad Co., and for 2,000 tons of rail with the Bethlehem Steel Company. In addition to the order for 25,000 tons of rail, the company will order the necessary track accessories.

SIGNALING

THE NEW YORK, NEW HAVEN & HARTFORD is relocating and replacing its present signal and block system with a modern automatic signal system from Mystic, Conn., to Westerly, at a cost of about \$45,000. The work is to be carried out with company forces.

VIRGINIA.—Sealed bids will be received until 10:00 a. m., February 16, at the Virginia Department of Railways, Room 821, State Office Building, Richmond, Va., for 11 Norfolk Southern railroad grade crossing signal installations, located in Norfolk and Princess Anne Counties, Va.

SEABOARD AIR LINE.—Sealed proposals will be received by this road until 12:00 o'clock noon, February 18, for furnishing materials for the installation of highway grade crossing signals at one crossing in the State of Alabama as part of the federal grade crossing program. Further information may be obtained from J. L. Brown, purchasing agent of this road, Norfolk, Va.

ILLINOIS.—Sealed bids for furnishing signal materials to be used in connection with 10 federal aid grade crossing protection projects on the Chicago, Burlington & Quincy will be received until 10:00 a. m. (c.s.t.) February 14, by the State of Illinois, Department of Public Works and Buildings, Division of Highways, at the office of A. Benesch, engineer of grade separations, Room 10, Centennial building, Springfield, Ill.

FLORIDA.—Sealed bids are wanted by the State Road Department of Florida at Tallahassee, Fla., until 10:30 a. m., February 9, for furnishing materials to be used in the installation at 12 different locations in Florida of automatic railway-highway flashing light crossing signals on the Florida East Coast Railway. Arthur B. Hale is chairman of the State Road Department of Florida. Plans and specifications may be obtained from L. C. Frohman, chief engineer of the railroad, St. Augustine, Fla.

Continued on next left-hand page

LIMA POWER AT WORK



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To meet the new requirements of modern passenger service, locomotives must combine high sustained tractive effort, rapid acceleration to road speed and low operating costs.

LIMA LOCOMOTIVE WORKS,



INCORPORATED, LIMA, OHIO

Supply Trade

The Pacific Car & Foundry Co., has moved its Seattle, Wash., office to 220 West Hudson street.

W. G. Dixon & Associates, St. Louis, Mo., have been appointed agents for the Hercules Motors Corporation, Canton, Ohio.

The United States Rubber Company, Mechanical Goods Division, Baltimore branch, which has heretofore functioned under supervision of the Philadelphia branch, will, in future, operate as an independent branch, under R. F. Jackson, as manager of mechanical sales; Frank M. Urban, assistant to W. T. Keenan, manager mechanical sales, Chicago branch, has been appointed assistant manager, mechanical sales, Chicago branch.

The American Rolling Mill Company, Middletown, Ohio, has reorganized the home office of its Sheet and Strip Sales division. F. A. Tobitt, manager of enameling sheet sales, has been appointed manager of eastern sales, J. A. Ingwersen, manager of hot and cold rolled sales, has been appointed manager of midwestern sales, and G. W. Breiel, manager of galvanized and long terne sales, has been appointed manager of southern-western sales.

O. E. Mount, secretary and assistant treasurer of the American Steel Foundries, Chicago, has been promoted to secretary and treasurer. He was born on August 22, 1892, at Petersburg, Tenn., and entered railway service in 1907 as a stenographer in the passenger department of the Nashville, Chattanooga & St. Louis at Nashville, Tenn. In 1909, he joined the navy, serving as chief clerk until 1916 when he entered the employ of the American Steel Foundries as cashier at the Chester, Pa., plant. Shortly thereafter, he was ap-



O. E. Mount

pointed assistant auditor of that plant. From April 1, 1920, to March 21, 1929, he was works auditor at the company's East St. Louis, Ill., plant. On the latter date he was promoted to assistant treasurer which position he held until November 10,

1931, when he was also made assistant secretary. He held the latter position until March 24, 1932, when he was promoted to secretary and assistant treasurer.

OBITUARY

Fred O. Smith, vice-president of the Vulcan Iron Works, builder of locomotives, died suddenly at his home in Wilkes-Barre, Pa., on January 21. Mr. Smith was 62 years of age at the time of his death.

Charles A. Seley, consulting engineer of the Locomotive Firebox Company, Chicago, died in that city on January 19, of general debility. Mr. Seley was born at



Charles A. Seley

Wapella, Ill., on December 26, 1856, and entered railway service in 1879 as a draftsman for the St. Paul, Minneapolis & Manitoba, now part of the Great Northern. From 1881 to 1896, he engaged in other work of a mechanical engineering nature and in the latter year became chief draftsman for the St. Paul & Duluth, now part of the Northern Pacific. From 1888 to 1892, he was employed by the Great Northern. In the latter year he entered the railway supply business and after three years returned to railway service as chief draftsman for the Chicago Great Western. In April, 1899, he became mechanical engineer of the Norfolk & Western and in 1902, mechanical engineer for the Chicago, Rock Island & Pacific at Chicago. On May 1, 1913, he again left railway service and became president of the American Flexible Staybolt Company, which company he helped to organize and with which he continued until its dissolution in 1921. In 1923, he became consulting engineer for the Locomotive Firebox Company. During his railway service he was a member of the executive committee of the Master Mechanics Association for six years and of the Master Car Builders Association for two years. He was a member of the subcommittee of the Association of American Railroads on the relation of railway operations to legislation in the matter of safety appliances, and wrote existing specifications for steel postal cars. He was president of the Western Railway Club in 1907-08.

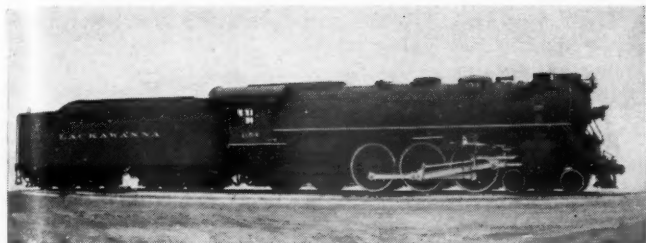
Construction

CANADIAN NATIONAL.—Contracts for starting work on that part of the modified terminals plan to be carried out at Montreal, Que., during 1939, as announced by the National system, have been let as follows: To Duranceau & Duranceau, Montreal, for excavating rock and other material between Cathcart and Lagauchetiere streets, for the construction of a reinforced concrete sub-track structure between Dorchester and Lagauchetiere streets, and constructing an extension of a section of the viaduct between St. Antoine and St. James streets; to E. G. M. Cape & Co., Montreal, for the completion of the viaduct structure between St. James and Notre Dame streets, and construction of the reinforced concrete floor for the tracks on the subways over Notre Dame and St. James streets after the steel girders are erected. The excavation is to provide for the trackage, service ducts, drainage, and foundations of structures. The material so excavated will be used for the making of railway embankments between the end of the viaduct at Ottawa street and Victoria Bridge and at Point St. Charles. The reinforced concrete sub-structure will form a portion of the basement of the station which will be used for baggage, mail and express rooms. Ramps from these rooms to the platforms will be used to transfer baggage, mail and express to and from the trains. The construction of ducts will provide for the service facilities for the baggage, mail and express rooms and the station. These services include drainage, sewers, steam for heating, electric conduits, etc. The top, or roof, of the sub-track space, will support the tracks and platforms. The greater part of the reinforced concrete viaduct structure between St. Antoine and Ottawa streets has been completed; there are two sections, one North and one South of St. James street, which remain to be constructed. The tracks will be carried on the roof of the viaduct; this work will permit the erection of the bridge over St. James street, and will also provide the South support, or abutment, for a bridge over St. Antoine street.

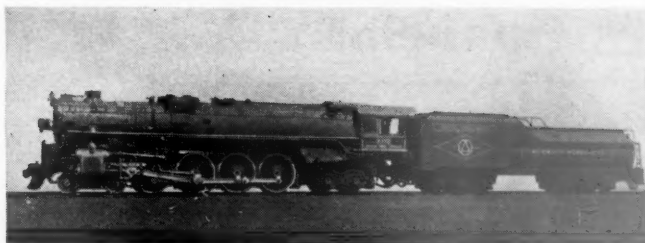
CENTRAL OF GEORGIA.—This road has contracted with the Dearborn Chemical Company, Chicago, for a complete internal type water treating program, involving the construction of 34 wayside treating plants.

ILLINOIS CENTRAL.—A contract has been awarded the Forcun-James Company, Memphis, Tenn., amounting to \$50,390 for the construction of the Central Avenue subway under the tracks of the Illinois Central in Memphis.

ST. LOUIS-SAN FRANCISCO.—The contract awarded to O. J. Pharaoh, Henryetta, Okla., for the construction of 4½ miles of relocated main track of the Frisco and a new bridge over Grand river near Wyandotte, Okla., as described in the *Railway Age* of December 24, has been rescinded, and this work has been awarded under a new contract amounting to \$496,228 to L. Sanders, Oklahoma City, Okla.



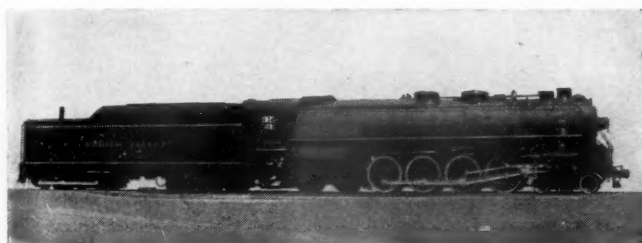
Delaware, Lackawanna & Western R. R.



Richmond, Fredericksburg & Potomac R. R.



New York Central System



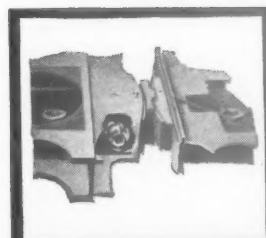
Lehigh Valley R. R.



Atlantic Coast Line R. R.

E-2 Buffer provides better riding, greater safety, and lower maintenance

The Franklin E-2 Radial Buffer eliminates all slack between engine and tender, thus absolutely preventing one of the principal causes of hard riding. » » » It permits full freedom of movement, laterally and vertically, and cannot get into improper position. It will not interfere with proper tracking of the engine, thus insuring greater safety. » » » Because it eliminates excessive vibration and greatly reduces the number of pipe failures, loose cabs, and other related defects, the cost of maintenance is greatly reduced. The E-2 Buffer pays for itself quickly.



Franklin Type E-2 Radial Buffer dampens oscillation between engine and tender and makes for easier riding.



FRANKLIN RAILWAY SUPPLY COMPANY, INC.

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Financial

BALTIMORE & OHIO.—Receivership Petition Denied.—Judge Murray Hulbert of the federal district court at New York on January 24 denied a petition for the appointment of a receiver for this road filed by Oscar Getz, of Chicago, holder of \$10,000 of B. & O. refunding and general mortgage bonds, series D. The plaintiff had filed suit on January 21 charging fraud in transfers of the road's collateral and violations of its bond indenture and demanding the appointment of a receiver for the road and the replacement of new trustees for the Central Hanover Bank & Trust Co., New York, J. N. Wallace and G. W. Davison, as trustees of bond issues not to exceed \$600,000,000. He named the aforesaid trustees and the railroad as defendants, and requested an injunction to prevent all further disposal of securities pledged under the bond indenture. Later he withdrew that part of his petition asking for a receiver for the railroad proper.

Specifically, Mr. Getz asserted that, while the total face value of securities pledged under a trust indenture dated December 1, 1915, was \$333,202,130, the total amount of securities now on hand is only \$159,113,575. He charged, therefore, that the sum of \$174,088,555 of pledged securities is missing and unaccounted for which was "unlawfully and fraudulently" transferred, assigned or disposed of. The plaintiff further alleged that large amounts realized from the sale of refunding and general mortgage bonds were used to pay interest and operating expenses of the road or its subsidiaries, in violation of indenture provisions.

According to the Associated Press, Daniel Willard, president of the road, on January 21 made no comment on the suit except to express regret and state that he had hoped the plan for modification of interest charges and maturities might be made effective without resort to the courts. At hearings early this week, counsel for the railroad categorically denied the charges and described the action as "reckless," pointing out that Mr. Wallace, named a defendant, as co-trustee, died in 1919.

BOSTON & MAINE.—Extension of RFC Loans.—This company has asked the Interstate Commerce Commission for its approval and the Reconstruction Finance Corporation for an extension of two years on its loans totaling \$10,071,834, maturing February 1, 1939. In the application the carrier stated that it estimated its 1939 net as \$939,070 as compared with a deficit for 1938 of \$5,099,628.

CHICAGO & NORTH WESTERN—CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—Reopening of Reorganization Cases Denied.—The petitions of the protective committees for the C. & N. W. common stock holders and the Milwaukee preferred holders to reopen these roads' reorganization cases so as to permit the filing of a plan of reorganization for the two roads which would provide for their consolidation has been denied by Division 4 of the Interstate

Commerce Commission. The Finance Division felt that "further proceedings would too long delay this determination and the enforcement of the rights of creditors."

BOSTON & MAINE.—Pledge of Bonds.—The Interstate Commerce Commission, Division 4, has modified its order of February 5, 1937, so as to permit this company to pledge and repledge from time to time to and including February 1, 1941, all or any part of \$7,500,000 of its first mortgage five per cent gold bonds, series KK, and \$17,500,000 of its first mortgage six per cent gold bonds, series LL, as collateral security for any short term notes that it may issue.

Notes.—Division 4 has also modified its order of February 5, 1937, so as to permit this company to renew, extend, or reissue the notes described in the order, in the amount of \$5,500,000, or to issue new notes in substitution therefor; the notes to bear interest at 4½ per cent per annum, the latest maturity date of any of the notes to be February 1, 1941.

CHICAGO, INDIANAPOLIS & LOUISVILLE.—To continue as sole trustee.—The U. S. District Court, Chicago, on December 28, 1938, entered an order authorizing Holman D. Pettibone, surviving trustee, to continue as sole trustee of the Chicago, Indianapolis & Louisville (Monon).

DENVER & RIO GRANDE WESTERN.—Trustees' Certificates.—The Interstate Commerce Commission, Division 4, has authorized the trustees to issue and sell at not less than par and accrued interest \$5,000,000 of trustees' certificates, series G, dated February 1, 1939, bearing interest at the rate of 3½ per cent. The certificates will be used to meet maturing certificates in a like amount.

FAIRPORT, PAINESVILLE & EASTERN.—Stock.—The Interstate Commerce Commission, Division 4, has authorized this company to issue \$433,000 of common stock, consisting of 4,335 shares of a par value of \$100 each, to be sold at par and the proceeds applied to the redemption of \$435,000 of its outstanding first mortgage six per cent gold bonds, series A.

LEHIGH VALLEY.—Hearing on Interest Deferment Plan.—The Interstate Commerce Commission has announced that a public hearing on this company's interest deferment plan will be held before Commissioner Mahaffie and Examiner Devoe in Washington on January 31.

LOUISVILLE, ARKANSAS & TEXAS.—Abandonment.—This company has asked the Interstate Commerce Commission for authority to abandon a line extending from Farmersville, Tex., to McKinney, 16.1 miles.

PITTSBURGH & WEST VIRGINIA.—RFC Loan.—This company has filed an amended application with the Interstate Commerce Commission asking for approval of a loan of \$7,500,000 from the Reconstruction Finance Corporation, to mature in five years, with the interest rate to be fixed by the RFC with the approval of the commission. The company had previously asked the

RFC to guarantee its secured notes for the same amount.

ST. LOUIS SOUTHWESTERN.—Reorganization Case Reopened.—The Interstate Commerce Commission, has reopened this company's reorganization case to hold a further hearing on February 23 on charges of Walter E. Meyer, a former Cotton Belt director, that the Southern Pacific had violated its fiduciary relationship with the road and had precipitated its bankruptcy. The finance division of the commission had previously rejected petitions of Mr. Meyer asking for a reopening of the case, and the notice of the commission gave no reason as to why it acted contrary to Division 4's previous rulings.

The hearing will be held before Commissioner Aitchison. Mr. Meyer will be followed by those who will appear to assist him in substantiating his allegations. Those appearing to controvert the allegations will be heard afterward.

SEABOARD AIR LINE.—Equipment Trust Certificates.—The Interstate Commerce Commission, Division 4, has authorized the receivers to assume liability for \$640,000 of three per cent equipment trust certificates, maturing in 10 equal annual installments of \$64,000 on January 1, in each of the years from 1940 to 1949, inclusive. The certificates will be sold at par and accrued dividends to the Reconstruction Finance Corporation or its nominee or nominees. The commission has also authorized the RFC to either purchase or guarantee the principal and interest of the certificates.

SOUTHERN PACIFIC.—New Directors Elected.—The following directors were elected to the board of this company on January 19: Clarence Stanley, Pittsburgh, Pa.; Lawrence Coolidge, Boston, Mass.; and W. F. Bull, New York, secretary of the company. They fill vacancies left by the late H. W. DeForest and the resignations of Paul Shoup and J. F. Harris.

WABASH.—Equipment Trust Certificates.—The receivers have asked the Interstate Commerce Commission for authority to issue \$7,500,000 of receivers' equipment trust certificates, bearing interest at 3½ per cent and maturing in 15 semi-annual installments of \$500,000 each on July 1, 1939 and January 1 and July 1, in each year thereafter until and including July 1, 1946. The proceeds of the certificates will be used to pay off all outstanding equipment trust certificates.

Dividends Declared

Augusta & Savannah.—(Resumed) 40c, payable January 16 to holders of record January 4.
Erie & Kalamazoo.—\$2.00, payable February 1 to holders of record January 26.
Louisville & Nashville.—\$1.00, payable February 28 to holders of record January 30.
Louisville Henderson & St. Louis.—5 Per Cent Preferred, \$2.50, semi-annually, payable February 15 to holders of record February 1.
Wheeling & Lake Erie.—Preferred, \$1.38, quarterly; Prior Lien, \$1.00, quarterly, both payable February 1 to holders of record January 30.

Average Prices of Stocks and Bonds

	Jan. 22	Last week	Last year
Average price of 20 representative railway stocks..	29.46	31.93	30.22
Average price of 20 representative railway bonds..	60.79	61.43	62.17

Continued on next left-hand page

NO. 81 OF A SERIES OF FAMOUS ARCHES OF THE WORLD



Photo by Arthur Byne—from "Bridges" by Charles S. Whilney—Published 1929 by William E. Rudge

PUENTE TRAJAN
ALCANTARA, SPAIN

Playing an important part in history from its construction in 98 A.D. up to the present, is the Puente Trajan, which was built by the order of the Emperor Trajan. The span of the six arches is approximately 98 feet each, and the piers are 29½ feet thick. « « « The bridge has suffered more from warring armies than from the elements. Two of the smaller arches have been destroyed and rebuilt. In 1214 the smallest arch on the left side of the river was destroyed by the Moors; this was rebuilt in 1543. Later, the second arch, on the right, was destroyed by the Spanish to stop the Portuguese army. This was repaired by

Charles III in 1762. In 1819, temporary repairs were made with wood, and the present stone arch was built in 1860.

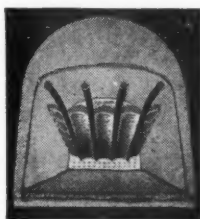
* * * * *

The Security Sectional Arch has played an important part in the development and perfection of modern railroad fuel economies; from its introduction 28 years ago it has been constantly developed with progress in locomotive design, and is today an essential factor in the successful operation of high-speed, high-capacity trains.

THERE'S MORE TO SECURITY ARCHES THAN JUST BRICK

HARBISON-WALKER
REFRACTORIES CO.

Refractory Specialists



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60 EAST 42nd STREET, NEW YORK, N. Y.

*Locomotive Combustion
Specialists*

Railway Officers

EXECUTIVE

W. M. Smith, superintendent of organization in the president's office of the Railway Express Agency, has been appointed



W. M. Smith

executive assistant to the president, at New York, succeeding **Albert W. Hayes**, who has been appointed general manager of the Texas department, at Houston, Texas. Mr. Hayes succeeds **Edwin K. Stone**, who has retired after 40 years of continuous service in the express business, eleven of which were spent as general manager of the Texas department.

Mr. Smith began his express career as a clerk at Murfreesboro, Tenn., a little over 33 years ago. Later he became agent at Humboldt, Tenn., Evansville, Ind., and Nashville, Tenn., being appointed general agent in the latter city in December, 1933. He went to Miami, Fla., in the same position about two years later; and to Jacksonville, Fla., as superintendent of the city division in March, 1927. Mr. Smith became superintendent of the Georgia divi-

1937, Mr. Smith went to the president's office at New York where he served as superintendent of organization and chairman of the Standard Practices Committee.

Mr. Hayes has been in the express business for almost 39 years. After serving successively as messenger, agent, route agent and a chief clerk to various operating officials in the middle west, he became assistant in the vice-president's offices at Chicago in July, 1914. He was in charge of the Wells Fargo vehicle operations in that city for two years and was superintendent of organization on the vice-president's staff for about nine years. He was then assigned to Omaha, Neb., as superintendent of the Nebraska, Wyoming and Iowa division. In May, 1935, Mr. Hayes went to New York as assistant to vice-president in charge of traffic at the executive headquarters. He was appointed executive assistant to the president in August, 1937.

W. Gordon White, superintendent of organization on the vice-president's staff, Eastern departments, Railway Express Agency, New York, has been appointed assistant to vice-president, succeeding **J. F. Ross**, whose appointment as general manager of the New York City department was noted in the *Railway Age* of De-



W. G. White

cember 17. Mr. White has been in the express business for 35 years, starting in Norfolk, Va., in 1903, where he remained for five years. He was assigned to special work, including route agent, in Baltimore, Md., and Richmond, Va. He went to Philadelphia, Pa., in August, 1915, to become chief clerk to general manager and two years later assistant to general manager. In September, 1918, Mr. White was transferred to New York as assistant to general manager of transportation, Eastern departments, which position he held for nearly 17 years. In April, 1936, Mr. White was assigned to special work in the vice-president's office, becoming superintendent of organization in December, 1936.

FINANCIAL, LEGAL AND ACCOUNTING

Harold S. Wood, chief clerk to the president of the Richmond, Fredericksburg & Potomac, has been elected assistant sec-

retary, to succeed **J. S. Patterson, Jr.**, deceased.

R. V. Halsey, assistant to the general solicitor of the Norfolk & Western, at Roanoke, Va., has been promoted to assistant general solicitor.

OPERATING

J. Murguia, assistant to general manager of the Mexico-North-Western, with headquarters at Ciudad Juarez, Mex., has been promoted to general manager, with the same headquarters succeeding **F. J. Clark**, whose election to vice-president is announced elsewhere in these columns.

Norman Harrison, assistant yardmaster on the Fort Wayne division of the Pennsylvania, has been promoted to assistant trainmaster and division operator of the Chicago Terminal division, with headquarters at Chicago, succeeding **G. B. Schroyer**, who retired on January 16.

J. T. Waddell, trainmaster of the Tennessee Central, with headquarters at Nashville, Tenn., has been promoted to assistant superintendent, with the same headquarters, and **J. R. Mahoney**, general yardmaster of the Nashville terminal, has been advanced to assistant trainmaster.

Ralph A. Cox, assistant to vice-president of the Railway Express Agency, at San Francisco, Cal., has been appointed general manager of the Mid-West department, at Omaha, Neb., succeeding **L. P. Bergman**, who has been transferred to San Francisco, Cal., in the same capacity, with general supervision of matters arising in the Western departments pertaining to labor relations and other special duties. Mr. Bergman succeeds **Mark Thompson**, who has retired after almost a half century of active express service. Mr. Thompson has been general manager at San Francisco since last October, prior to which he was general manager of the South Pacific department at Los Angeles, Cal., for more than four years.

Mr. Cox has been in the express business in the West for about 39 years. He



Albert W. Hayes

sion at Atlanta in September, 1931, and was appointed superintendent of organization in the South in May, 1934. In July,



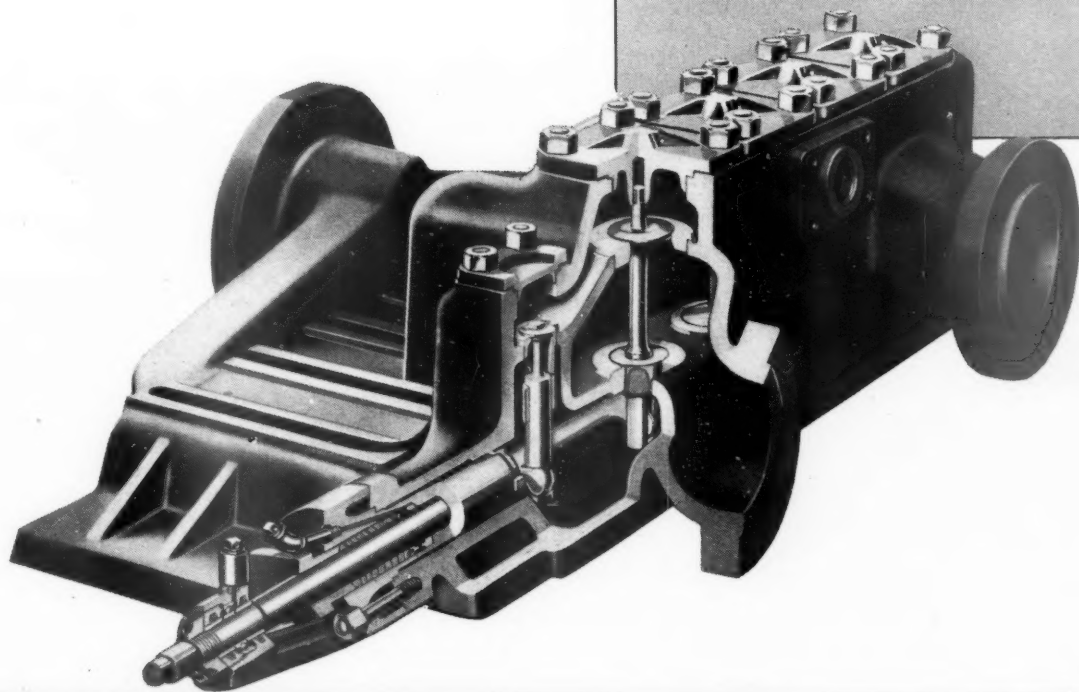
R. A. Cox

was born on April 4, 1882, at Salem, Ore., and entered the service of Wells Fargo & Company in June, 1900, as a clerk at Salem,

Small Steel Valves

Do Not Warp

... and this is the
type of valve that is
used on American
multiple-valve
throttles.



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and served as agent at various points in Oregon and Nevada, including the mining towns of Goldfield and Tonopah. In July, 1909, he went to San Francisco as chief clerk on the superintendent's staff and in July, 1915, went to El Paso, Tex., in a similar capacity. Three years later, when Wells Fargo & Company was consolidated with other express organizations to form the American Railway Express Company, Mr. Cox was appointed superintendent of organization at San Francisco. After the American Railway Express Company became the Railway Express Agency, Inc., in 1929, Mr. Cox served as superintendent at various points until January 1, 1935, when he became superintendent of organization at San Francisco. On June 1, 1935, he was further advanced to superintendent of transportation and traffic, with the same headquarters. On June 1, 1936, he was appointed assistant to vice-president.

ENGINEERING AND SIGNALING

P. O. Ferris, acting engineer maintenance of way of the Delaware & Hudson, with headquarters at Albany, N. Y., has been appointed engineer maintenance of way.

Thomas L. Doyle, division engineer of the Columbus division of the Pennsylvania, has been promoted to assistant to the general manager, Western Region, at Chicago, succeeding **John M. Henry**, whose retirement on January 1 was announced in the *Railway Age* of January 7.

PURCHASES AND STORES

H. C. Young, acting purchasing agent of the Delaware & Hudson, with headquarters at Albany, N. Y., has been appointed purchasing agent.

SPECIAL

L. J. Benson, whose promotion to assistant to the chief operating officer of the Chicago, Milwaukee, St. Paul & Pacific, in charge of police, fire prevention and safety, with headquarters at Chicago, was announced in the *Railway Age* of January 14, entered railway service in 1906,



L. J. Benson

as a call boy on the Milwaukee, later becoming a passenger trainman. In 1909, he was transferred to the police department

later being promoted to captain of police at La Crosse, Wis. He was transferred to Chicago, and was later advanced to chief special agent of the Western Lines with headquarters at Seattle, Wash. In 1923, he was promoted to general superintendent of police for the entire system, the position he held at the time of his recent appointment. Mr. Benson served eight terms as president of the Chicago Special Agents and Police Association and is a director of the International Association of Chiefs of Police.

OBITUARY

C. F. Impey, land commissioner of the Southern Pacific, with headquarters at San Francisco, Cal., died suddenly at his home in Oakland, Cal., on December 26.

Alexander M. Holcomb, who retired eight years ago as office engineer, lines Buffalo and East, New York Central, with headquarters at New York, died on January 19 at his home in that city, at the age of 78.

Andrew Gibson, who retired as superintendent of tie and timber treatment of the Northern Pacific, with headquarters at Brainerd, Minn., on July 1, 1930, died in St. Paul on January 10. Mr. Gibson started work with the Northern Pacific as a rodman in the engineering corps in 1883, was a division superintendent at Glendive, Mont., and Missoula for five years and was engineer maintenance of way of the railway from 1911 to 1917.

Everett M. Williams, treasurer of the Gulf, Mobile & Northern, with headquarters at Mobile, Ala., died suddenly at Mobile of a heart attack on January 1. Mr. Williams entered the service of the Birmingham & Northwestern (now part of the G. M. & N.) on April 16, 1916, as agent at Maury Junction, Tenn., and was later transferred to Tigrett, Tenn. In 1918, he was appointed chief clerk to the agent at Jackson, Tenn., and in 1925, he was promoted to assistant treasurer, with headquarters at Mobile. Mr. Williams was elected treasurer on March 26, 1931.

Hugh Wilson, whose retirement on November 1, 1938, as superintendent of the Salt Lake division of the Denver & Rio Grande Western, with headquarters at Salt Lake City, Utah, was announced in the *Railway Age* of November 19, died at San Diego, Cal., on December 26. Mr. Wilson was born at Lincoln, Neb., on September 21, 1876, and graduated in civil engineering from the University of Nebraska in 1897. He first entered railway service in 1894 between terms of school as a track laborer on the Chicago, Burlington & Quincy, and until his graduation in 1897 served intermittently as section laborer, section foreman, foreman and brakeman. In 1897, he was appointed a section foreman, and a year later he volunteered for service in the Spanish-American war. In 1899, he returned to the Burlington, as an instrumentman on location and later that year was promoted to roadmaster. In 1902, he was advanced to trainmaster and in 1905, he went with the Missouri Pacific as assistant

engineer. In 1906, he was promoted to superintendent, and in the following year he went with the D. & R. G. W. as an assistant superintendent. In 1910, he became a trainmaster on the Northwestern Pacific and in 1911, was promoted to assistant superintendent. From 1913 to 1914, he served as an expert on the Railway Commission of the State of California, returning to the Northwestern Pacific in 1914 as assistant to the president. Later in 1914, he went with the Baltimore & Ohio as special engineer on the vice-president's staff, and in 1916, he was appointed assistant superintendent. He was promoted to superintendent in 1918, and in 1919, he was appointed special assistant to the federal manager of the Chicago Great Western. In 1920, he was advanced to engineer of maintenance of way of the Great Western and in 1921, he returned to the D. & R. G. W. as a trainmaster. Mr. Wilson was promoted to superintendent with headquarters at Grand Junction, Colo., in 1924, and was later transferred to Salt Lake City.

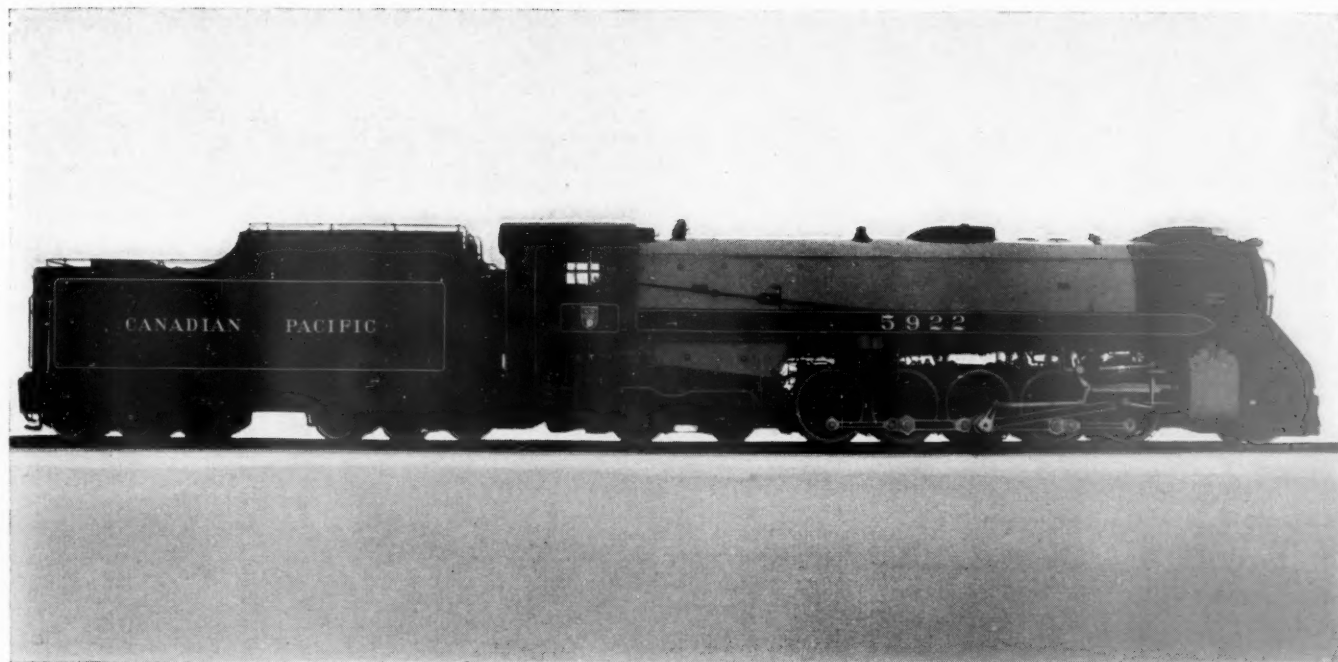
General F. G. Pettibone, who retired as vice-president and general manager of the Gulf, Colorado & Santa Fe on July 1,



F. G. Pettibone

1936, died on January 23, at Dallas, Texas after a short illness. Mr. Pettibone was born on September 27, 1861 at Rockford, Ill. He first entered railway service in 1875 with the Chicago, Burlington & Quincy, serving successively as a messenger boy, operator clerk and chief clerk to the superintendent at Burlington, Iowa until 1884. In 1885, Mr. Pettibone went with the St. Paul, Minneapolis & Manitoba (now a part of the Great Northern) as chief clerk to the assistant general superintendent at St. Paul, Minn. In the following year, he became connected with the Northern Pacific and served as chief clerk to the superintendent and as general superintendent until 1901, when he entered the service of the Gulf, Colorado & Santa Fe as assistant to the general manager. Two years later he was advanced to general superintendent on this road, and in 1906, he was further promoted to vice-president and general manager, which position he held until his retirement on July 1, 1936. At the time of his retirement, Mr. Pettibone was also president of the Houston, Belt & Terminal.

Table of Freight Operating Statistics appears on next left-hand page



TEN 2-10-4 type locomotives have been delivered recently to the Canadian Pacific. These locomotives will be used in fast freight and passenger service over the mountain divisions.

The design is the C. P. R. standard 2-10-4 type, modernized and streamlined to conform with their modern 4-4-4 type and 4-6-4 type, thereby continuing the same pleasing, striking appearance for all their new power built for main line service.

NEW POWER—NEW PROFITS

Weight on Drivers	309,900 pounds	Diameter of Drivers	63 inches
Weight of Engine	447,000 pounds	Boiler Pressure	285 pounds
Cylinders	25 x 32 inches	Tractive Power (with Booster)	88,900 pounds

MONTREAL LOCOMOTIVE WORKS, LIMITED
MONTREAL **CANADA**

Freight Operating Statistics of Large Steam Railways—Selected Items for the Month of November,

Region, road, and year	Miles of road operated	Train-miles	Locomotive-miles		Car-miles		Ton-miles (thousands)		Number of road locomotives on line					
			Principal and helper	Light	Loaded (thousands)	Per cent loaded	Gross, excluding locomotives and tenders	Net, revenue and non-revenue	Serviceable		Un-serviceable	Per cent un-serviceable		
									Not stored	Stored				
New England Region:														
Boston & Albany.....	1938	374	124,561	129,075	8,579	2,656	65.7	149,357	51,373	56	3	31	34.4	
	1937	374	130,676	135,672	8,765	2,737	63.6	158,711	54,509	62	7	22	24.2	
Boston & Maine.....	1938	1,937	255,356	284,019	24,349	8,493	68.6	477,965	179,671	131	1	107	44.8	
	1937	1,941	258,360	285,893	22,197	8,658	66.9	494,145	179,662	126	7	112	45.7	
N. Y., New H. & Hartf.....	1938	1,854	311,706	390,859	23,294	10,720	66.2	585,327	214,390	158	2	105	38.3	
	1937	2,006	321,611	394,117	24,084	10,721	66.3	585,292	217,983	183	22	64	24.1	
Great Lakes Region:														
Delaware & Hudson.....	1938	830	202,416	268,905	27,944	6,911	65.7	431,072	207,364	115	96	46	17.9	
	1937	830	220,720	291,179	30,514	7,286	62.0	467,139	218,003	112	120	28	10.8	
Del., Lack. & Western.....	1938	983	324,909	363,660	49,466	11,585	68.9	665,071	262,288	123	2	84	40.2	
	1937	983	358,262	396,340	51,227	11,565	66.7	688,936	273,017	122	17	82	37.1	
Erie (incl. Chi. & Erie).....	1938	2,292	622,054	661,194	35,629	26,633	64.0	1,638,963	600,574	219	18	234	49.7	
	1937	2,277	654,993	691,291	37,253	27,043	61.6	1,704,865	623,682	235	32	201	42.9	
Grand Trunk Western.....	1938	1,027	245,250	246,505	1,766	6,495	61.1	403,316	138,638	70	..	46	39.7	
	1937	1,027	247,529	249,672	2,679	6,318	60.6	397,429	141,134	80	..	43	35.0	
Lehigh Valley	1938	1,267	279,379	308,141	46,244	11,205	67.1	685,528	287,237	126	2	111	46.4	
	1937	1,290	326,907	358,342	45,528	12,208	63.0	785,029	326,418	131	6	136	49.8	
New York Central.....	1938	10,651	2,486,487	2,626,865	166,486	81,424	58.8	5,564,432	2,283,219	866	127	483	32.7	
	1937	10,649	2,680,708	2,824,067	155,518	85,255	57.1	5,855,903	2,324,772	899	199	382	25.8	
New York, Chi. & St. L.....	1938	1,672	465,524	474,363	5,785	16,369	62.0	1,000,780	363,086	155	9	34	17.2	
	1937	1,672	471,938	476,667	5,985	15,391	60.7	961,645	351,870	158	18	20	10.2	
Pere Marquette.....	1938	2,081	329,134	333,713	6,304	8,880	59.6	586,084	222,020	113	1	52	31.3	
	1937	2,081	336,056	340,823	5,702	8,854	58.3	586,767	217,640	114	12	32	20.3	
Pitts. & Lake Erie.....	1938	233	70,936	73,276	..	2,841	59.6	245,402	137,596	36	3	36	48.0	
	1937	234	65,997	68,458	16	2,617	57.4	227,492	123,725	29	19	24	33.3	
Wabash	1938	2,397	533,319	542,813	11,325	16,479	64.2	978,128	343,151	133	9	131	48.0	
	1937	2,421	572,663	582,920	12,698	16,485	63.1	1,001,091	355,750	153	25	113	38.8	
Central Eastern Region:														
Baltimore & Ohio.....	1938	6,307	1,318,448	1,602,057	171,624	39,836	60.0	2,807,303	1,236,991	611	132	479	39.2	
	1937	6,330	1,404,618	1,733,287	172,394	40,314	57.8	2,878,711	1,243,278	654	93	520	41.0	
Central of New Jersey.....	1938	681	139,670	159,229	31,487	4,373	61.5	301,023	141,433	74	3	76	49.7	
	1937	678	148,923	167,289	33,464	4,666	59.4	328,217	154,119	77	5	70	46.1	
Chicago & Eastern Ill.....	1938	927	169,521	169,633	2,866	4,233	63.3	274,963	114,874	51	..	55	51.9	
	1937	931	180,427	180,653	2,972	4,402	60.4	300,354	126,012	53	..	50	48.5	
Elgin, Joliet & Eastern.....	1938	435	89,239	90,559	1,314	2,044	56.1	164,855	78,271	51	2	29	35.4	
	1937	435	96,112	97,572	1,903	2,097	55.7	168,289	79,238	57	..	25	30.5	
Long Island	1938	390	29,926	31,067	16,694	269	50.9	20,750	7,576	26	7	15	31.3	
	1937	393	32,710	32,963	15,071	324	50.5	24,931	8,756	33	10	6	12.2	
Pennsylvania System	1938	10,011	2,685,971	3,107,330	354,403	94,022	60.9	6,184,721	2,678,091	1,179	160	1,013	43.1	
	1937	10,649	2,680,708	2,824,067	155,518	85,255	57.1	6,401,753	2,790,167	1,277	457	584	25.2	
Reading	1938	1,442	355,411	393,963	46,406	10,214	62.1	737,691	358,001	175	20	159	44.9	
	1937	1,445	409,777	446,559	47,982	10,745	59.8	805,237	385,701	200	18	114	34.3	
Pocahontas Region:														
Chesapeake & Ohio.....	1938	3,050	805,845	842,641	36,464	35,471	54.5	3,044,450	1,639,523	362	31	136	25.7	
	1937	3,050	830,611	869,499	38,178	34,696	52.7	3,031,015	1,603,054	383	56	109	19.9	
Norfolk & Western	1938	2,169	617,949	642,395	34,629	26,355	58.0	2,196,579	1,162,790	268	52	45	12.3	
	1937	2,179	625,420	649,507	34,135	24,246	56.9	2,029,525	1,061,833	295	38	26	7.2	
Southern Region:														
Atlantic Coast Line.....	1938	5,079	578,028	580,347	8,298	12,022	59.4	720,010	233,912	258	27	98	25.6	
	1937	5,074	582,686	584,346	8,290	12,853	58.6	738,221	249,407	240	40	99	26.1	
Central of Georgia.....	1938	1,838	239,371	240,963	3,334	4,957	68.1	284,375	107,309	92	..	32	25.8	
	1937	1,886	240,937	242,458	3,128	4,672	63.6	283,632	106,793	102	..	19	15.7	
Illinois Central (incl. Y. & M. V.).....	1938	6,540	1,269,438	1,275,291	23,753	34,555	59.5	2,299,854	926,248	628	13	213	24.9	
	1937	6,541	1,410,936	1,419,031	26,860	35,652	58.4	2,431,110	983,909	659	35	163	19.0	
Louisville & Nashville.....	1938	4,928	998,025	1,064,284	27,936	23,775	58.6	1,702,051	801,622	326	12	206	37.9	
	1937	4,932	1,066,113	1,153,124	26,596	23,768	56.3	1,746,441	811,774	353	55	146	26.4	
Seaboard Air Line.....	1938	4,305	517,423	538,224	3,654	12,612	62.2	765,520	277,135	217	13	86	27.2	
	1937	4,295	525,598	539,616	4,895	13,417	62.2	809,358	290,556	218	13	78	25.2	
Southern	1938	6,561	1,255,689	1,274,360	19,225	27,320	63.5	1,629,978	626,019	476	16	211	30.0	
	1937	6,596	1,250,625	1,270,026	18,789	26,191	61.1	1,585,199	613,033	538	1	230	29.9	
Northwestern Region:														
Chi. & North Western.....	1938	8,394	826,886	854,473	20,871	23,412	61.5	1,499,569	562,623	278	162	258	37.0	
	1937	8,388	943,844	983,459	26,805	24,283	59.6	1,577,574	582,840	377	139	190	26.9	
Chicago Great Western.....	1938	1,450	265,236	267,788	9,385	7,308	59.0	468,005	158,261	67	1	29	29.9	
	1937	1,450	273,821	274,947	5,449	7,311	57.5	472,746	163,446	64	..	30	31.9	
Chi., Milw., St. P. & Pac.....	1938	10,941	1,205,988	1,242,784	39,464	32,480	60.2	2,125,012	841,402	439	95	159	22.9	
	1937	11,043	1,297,903	1,356,362	49,793	33,006	59.6	2,161,042	851,453	522	28	130	19.1	
Chi., St. P., Minneap. & Om.....	1938	1,619	207,363	217,094	9,428	4,714	64.2	293,095	119,363	107	13	20	14.3	
	1937	1,636	226,967	237,278	12,387	5,020	64.0	318,608	132,197	114	7	25	17.1	
Great Northern	1938	7,976	774,614	772,692	29,090	24,924	62.9	1,646,879	677,388	335	66	154	27.7	
	1937	7,975	742,208	741,282	27,822	23,690	66.7	1,461,649	621,705	343	73	143	25.6	
Minneap., St. P. & S. St. M.....	1938	4,266	366,128	367,432	3,546	7,707	63.9	458,762	180,251	119	1	32	21.1	
	1937	4,277	378,178	384,079	3,229	7,673	63.6	460,330	180,350	118	2	34	22.1	
Northern Pacific	1938	6,423	625,168	650,611	31,166	19,592	68.8	1,186,626	506,141	355	23	86	18.5	
	1937	6,423	641,173	666,427	33,564	19,814	66.4	1,224,157	509,860	373	29	59	12.8	
Central Western Region:														
Alton	1938	912	185,888	195,177	1,063	3,915	61.4	248,624	93,338	62	13	19	20.2	
	1937	912	202,134	213,062	1,878	4,153	58.0	275,473	110,031	67	..	32	32.3	
Atch., Top. & S. Fe (incl. G.C. & S.F. and P. & S.F.).....	1938	13,500	1,823,453	1,936,240	89,901	50,114	59.4	3,260,969	1,022,065	601	32	288	31.3	
	1937	13,537	1,926,292	2,058,278	92,370	52,651								

1938, Compared with November, 1937, for Roads with Annual Operating Revenues Above \$25,000,000

Region, road, and year	Number of freight cars on line			Per cent un-service-able	Gross ton-miles per hour, excluding locomotives and tenders		Net ton-miles per train-mile	Net ton-miles per loaded car-mile	Net ton-miles per car-day	Car-miles per car-day	Net ton-miles per mile of road per day	Pounds of coal per 1,000 gross ton-miles, including locomotives and tenders	Locomotive-miles per locomotive-day
	Home	Foreign	Total		Gross ton-miles per train-mile, excluding locomotives and tenders	Net ton-miles per train-mile							
New England Region:													
Boston & Albany.....1938	1,058	4,071	5,129	3.0	18,698	1,211	417	19.3	320	25.2	4,579	171	54.7
1937	2,132	3,625	5,757	27.3	20,660	1,225	421	19.9	302	23.8	4,858	173	56.2
Boston & Maine.....1938	7,403	8,549	15,952	10.9	24,331	1,878	706	21.2	371	25.6	3,092	103	47.5
1937	7,783	6,235	14,018	13.4	26,673	1,921	699	20.8	407	29.3	3,085	102	45.7
N. Y., New H. & Hartf....1938	7,702	12,514	20,216	9.0	26,754	1,912	700	20.0	358	27.0	3,855	107	57.0
1937	9,709	10,291	20,000	12.8	26,440	1,848	688	20.3	364	27.0	3,622	107	57.6
Great Lakes Region:													
Delaware & Hudson.....1938	7,534	2,978	10,512	4.9	32,502	2,142	1,030	30.0	627	31.8	8,328	109	40.3
1937	8,188	3,118	11,306	3.9	29,584	2,124	991	29.9	641	34.5	8,755	108	44.0
Del., Lack. & Western.....1938	12,889	6,708	19,597	17.5	37,681	2,075	818	22.6	454	29.1	8,894	133	68.8
1937	13,589	6,152	19,741	14.0	33,216	1,946	771	23.6	466	29.6	9,258	139	73.3
Erie (incl. Chi. & Erie)....1938	16,661	12,843	29,504	6.0	44,315	2,657	974	22.5	669	46.4	8,734	100	54.7
1937	18,653	13,046	31,699	5.3	43,740	2,622	959	23.1	630	44.4	9,130	102	57.5
Grand Trunk Western.....1938	5,073	6,214	11,287	15.8	32,694	1,657	569	21.3	405	31.1	4,500	97	78.6
1937	5,293	5,835	11,128	14.6	30,320	1,614	573	22.3	393	29.0	4,581	103	75.4
Lehigh Valley1938	10,446	10,137	20,583	6.9	45,559	2,481	1,039	25.6	467	27.1	7,557	118	52.5
1937	11,424	10,265	21,689	7.2	42,688	2,436	1,013	26.7	493	29.2	8,435	117	52.0
New York Central.....1938	95,762	61,212	156,974	22.1	37,126	2,257	926	28.0	476	28.9	7,146	106	71.1
1937	96,911	57,490	154,401	17.2	36,778	2,208	877	27.3	492	31.6	7,277	108	75.1
New York, Chi. & St. L.....1938	7,082	6,508	13,590	4.0	39,602	2,154	781	22.2	871	63.4	7,239	91	87.2
1937	7,788	6,492	14,280	2.7	36,857	2,041	747	22.9	811	58.4	7,015	96	88.7
Pere Marquette.....1938	9,983	6,654	16,637	4.7	29,212	1,782	675	25.0	449	30.1	3,556	90	76.5
1937	9,930	6,491	16,421	3.8	27,290	1,748	648	24.6	453	31.6	3,486	97	81.4
Pitts. & Lake Erie.....1938	9,915	8,922	18,837	34.1	45,852	3,465	1,943	48.4	243	8.4	19,685	93	35.6
1937	8,457	9,989	18,446	27.1	47,964	3,457	1,880	47.3	223	8.2	17,625	87	34.4
Wabash1938	15,686	9,219	24,905	9.5	37,844	1,859	652	20.8	451	33.7	4,772	119	70.6
1937	14,201	9,022	23,223	5.6	35,659	1,766	628	21.6	520	38.2	4,898	121	72.3
Central Eastern Region:													
Baltimore & Ohio.....1938	58,393	20,862	79,255	21.3	28,922	2,159	951	31.1	510	27.4	6,538	143	51.9
1937	61,844	20,845	82,689	13.1	27,213	2,079	898	30.8	488	27.4	6,547	149	53.8
Central of New Jersey.....1938	9,698	11,615	21,313	28.8	26,541	2,300	1,081	32.3	221	11.1	6,923	138	54.2
1937	10,306	10,160	20,466	27.0	27,950	2,323	1,091	33.0	257	13.1	7,577	143	58.2
Chicago & Eastern Ill.....1938	3,096	3,523	6,619	6.3	29,417	1,630	681	27.1	581	33.8	4,131	125	57.5
1937	3,082	3,162	6,244	2.2	29,374	1,672	701	28.6	679	39.3	4,512	129	62.6
Elgin, Joliet & Eastern.....1938	9,011	4,040	13,051	6.2	17,025	1,896	900	38.3	211	9.8	5,998	119	53.0
1937	8,885	2,267	11,152	4.3	16,641	1,807	851	37.8	228	10.8	6,072	128	57.1
Long Island1938	361	3,342	3,703	2.8	5,498	711	260	28.2	68	4.7	648	326	48.0
1937	383	3,093	3,476	2.6	6,261	782	275	27.0	86	6.3	743	310	46.1
Pennsylvania System1938	194,679	52,686	247,365	20.9	37,885	2,563	1,110	29.6	361	20.1	8,927	115	52.3
1937	192,268	59,850	252,118	15.2	35,215	2,424	1,056	29.7	370	20.4	9,290	124	56.5
Reading1938	25,248	11,335	36,583	22.3	25,988	2,081	1,010	35.1	328	15.1	8,276	139	46.0
1937	25,084	10,296	35,380	12.0	25,192	1,971	944	35.9	367	17.1	8,897	143	54.3
Pocahontas Region:													
Chesapeake & Ohio.....1938	46,635	10,992	57,627	3.1	56,198	3,807	2,050	46.2	959	38.1	17,918	77	61.1
1937	47,064	9,130	56,194	1.2	53,415	3,682	1,948	46.2	942	38.7	17,520	81	61.0
Norfolk & Western1938	38,223	4,378	42,601	8.0	54,144	3,597	1,904	44.1	957	37.4	17,870	96	68.3
1937	41,129	4,403	45,532	1.3	49,368	3,294	1,723	43.8	848	34.0	16,243	105	69.1
Southern Region:													
Atlantic Coast Line.....1938	17,647	6,874	24,521	23.6	21,681	1,252	406	19.5	314	27.2	1,535	109	56.0
1937	16,986	8,256	25,242	17.8	21,568	1,268	428	19.4	330	29.1	1,636	111	56.6
Central of Georgia.....1938	5,006	2,460	7,466	2.2	23,300	1,192	450	21.6	476	32.3	1,946	124	71.9
1937	5,004	2,504	7,508	1.8	21,608	1,180	444	22.9	485	33.3	1,887	128	74.3
Illinois Central (incl. Y. & M. V.).....1938	27,564	15,336	42,900	4.5	28,694	1,822	734	26.8	689	43.2	4,721	136	55.1
1937	33,639	18,915	52,554	13.4	27,464	1,732	701	27.6	623	38.7	5,014	139	60.9
Louisville & Nashville.....1938	40,487	8,706	49,196	19.2	26,393	1,707	804	33.7	553	28.0	5,422	130	71.5
1937	39,515	9,515	49,030	11.0	24,906	1,641	763	34.2	580	30.2	5,486	138	76.6
Seaboard Air Line.....1938	11,721	5,550	17,271	3.4	25,351	1,507	546	22.0	530	38.8	2,146	118	64.5
1937	11,345	5,782	17,127	2.2	25,383	1,569	563	21.7	555	41.2	2,255	119	65.1
Southern1938	21,774	18,789	40,563	10.0	22,888	1,306	502	22.9	517	35.5	3,181	142	64.4
1937	20,602	18,628	39,230	9.9	21,928	1,275	493	23.4	521	36.4	3,098	152	59.3
Northwestern Region:													
Chi. & North Western.....1938	39,752	18,799	58,551	9.3	28,929	1,880	705	24.0	314	21.2	2,234	121	45.6
1937	39,513	19,562	59,075	7.2	26,748	1,719	635	24.0	330	23.1	2,316	128	51.9
Chicago Great Western.....1938	2,552	3,475	6,027	2.8	32,728	1,767	598	21.7	856	67.0	3,638	133	103.2
1937	2,540	3,277	5,817	2.4	31,227	1,731	598	22.4	855	66.6	3,757	137	106.0
Chi., Milw., St. P. & Pac...1938	46,381	16,398	62,779	3.3	28,786	1,769	701	25.9	454	29.1	2,563	123	67.9
1937	46,890	17,437	64,327	2.4	27,213	1,672	659	25.8	449	29.2	2,570	128	76.1
Chi., St. P., Minneap. & Om.1938	3,241	5,314	8,555	8.5	19,068	1,422	579	25.3	473	29.1	2,458	116	58.8
1937	4,164	5,087	9,251	8.0	18,636	1,422	590	26.3	483	28.6	2,694	119	61.8
Great Northern1938	37,659	9,092	46,751	7.0	31,845	2,139	880	27.2	472	27.6	2,831	124	53.4
1937	37,989	10,037	48,026	4.8	28,565	1,982	843	26.2	424	24.2	2,599	124	51.6
Minneap., St. P. & S. St. M.1938	13,071	3,446	16,517	5.0	21,254	1,267	498	23.4	371	24.8	1,408	110	82.7
1937	12,945	3,373	16,318	3.6	20,049	1,221	478	23.5	363	24.3	1,406	113	85.8
Northern Pacific1938	30,698	5,009	35,707	8.5	29,470	1,908	814	25.8	478	26.9	2,627	149	54.0
1937	31,058	5,852	36,910	7.4	29,134	1,916	798	25.7	465	27.2	2,646	145	56.2
Central Western Region:													
Alton1938	1,805	5,878	7,683	10.6	33,040	1,348	506	23.8	405	27.7	3,412	122	73.7
1937	2,589	6,113	8,702	11.0	31,576	1,374	549	26.5	419	27.3	4,022	134	77.2
Atch., Top. & S. Fe (incl. G.C. & S.F. and P. & S.F.).....1938	76,763	11,675	88,438	11.8	34,258	1,793	562	20.4	396	32.7	2,524	126	77.5
1937	74,134	14,515	88,649	7.9	33,118	1,765	575	21.0	424	33.5	2,721	123	81.3
Chi., Burl. & Quincy.....1938	29,732	14,468	44,200	5.6	31,098	1,816	728	26.2					

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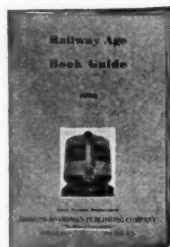
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